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ABSTRACT

The National Child Development Study is a longitudinal survey of all people who were born in the week of March 3-9, 1958 in England, Scotland, and Wales--approximately 17,000 people. A project used information collected from 12,500 of these people through interviews in 1981 when they were 23 years old. The project sought to determine (1) what practical problems beset people with literacy and numeracy difficulties; (2) which groups report difficulties with basic skills but are underrepresented in adult basic education courses; and (3) whether those who will have difficulties with numeracy and literacy in adulthood can be identified earlier in life. The study found that 13 percent of the sample reported some problems with basic skills, with about twice as many reporting problems with writing/spelling as with numeracy or reading. Many did not report any practical problems with daily life, but said the lack of skills kept them from applying for jobs. Most persons with skills problems were in paid employment, the majority in the manual working class groups. More of the group who lacked basic skills were unemployed than the group as a whole. Although men were more likely to report literacy problems, they were also more likely to have received help. People reporting basic skills problems were more likely to live in crowded housing and to have less money. (KC)

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LITERACY, NUMERACY AND ADULTS

EVIDENCE FROM THE NATIONAL CHILD DEVELOPMENT STUDY

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ALBSU
Adult Literacy & Basic Skills Unit

FOREWORD

We know very little about the backgrounds and needs of adults who have difficulties with reading, writing or basic maths. What information we have, is confined, for the most part, to our experience of adults who have sought help from literacy and numeracy schemes in different parts of the country. Our knowledge of those adults, who despite problems with basic skills, have not come forward for assistance, is very sparse. This Report, produced by Mary Hamilton and her colleague at the University of Lancaster, begins to shed some light on this significantly larger group.

The Report is the outcome of a one-year research project, jointly sponsored by the Adult Literacy and Basic Skills Unit (ALBSU) and the Manpower Services Commission. It is based on evidence collected by the National Child Development Study (NCDS) – a longitudinal survey of all children born in England, Scotland and Wales during one week in 1958. When this group was last questioned in 1981, 1676 individuals (13% of the group) indicated that they had experienced difficulties with literacy and/or numeracy since leaving school.

The Report provides evidence about the backgrounds of these individuals and the practical problems they encounter. It also considers why some young people left school with very inadequate mastery of essential skills. Consequently, it should be of interest to all those involved or interested in the education of children, young people and adults.

Hilda Jenkins,
Chair, ALBSU/MSC Research Project Advisory Committee

LITERACY, NUMERACY AND ADULTS

EVIDENCE FROM THE NATIONAL CHILD DEVELOPMENT STUDY

Project Director: **Mary Hamilton**

Research Officer: **Mikis Stasinopoulos**

An ALBSU and MSC sponsored research project, undertaken by the University of Lancaster.

ALBSU
Adult Literacy & Basic Skills Unit

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The Advisory Committee for this project who were: Hilda Jenkins (chair), Linda Ammon, Elspeth Cardy, Annabel Hemstedt, Deryn Holland, Mari Prichard, Ken Rogerson and Ros Seyd.

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Section 1: INTRODUCTION

This research project has examined information collected by the National Child Development Study (NCDS). The NCDS is a longitudinal survey of all people who were born in the week 3-9th March 1958 in England, Scotland and Wales, approximately 17,000 people. Several sweeps of interviewing have been completed, the latest one in 1981 when this group of people were aged 23 years. In this latest sweep 12,500 people were interviewed (74% of the original group) and the data identifies by self-report, a group of young adults who experience difficulties with literacy and numeracy.

Altogether about 13% of the group (1676 people) reported difficulties of some kind with either reading, writing or numeracy. These preliminary results were published in a short ALBSU booklet (Simonite, 1983).

1.1 Background and Aims of the project

The present project was funded by the Manpower Services Commission and the Adult Literacy and Basic Skills Unit to expand on these preliminary findings. The project set out to explore the following areas:

1. What are the everyday practical problems that people with literacy and numeracy difficulties report most often? Knowing more about this could ensure that schools and adult educators are providing learning programmes that are relevant to people's lives.

2. Are there particular groups who report difficulties with basic skills but who are under-represented on courses at the moment? Having more information about this would help those concerned with adult basic education to design and publicise learning opportunities which would be better suited to these groups.

3. Can we predict who will have difficulties with numeracy and literacy in adulthood? If so, what are the implications for earlier education? The NCDS interviews contain a great deal of information about people's social background and earlier educational experience that could be explored for this purpose.

The project set out to explore these questions by carrying out further computer analysis of the data collected during all sweeps of the survey. We also examined people's original responses from interview transcripts held in the National Children's Bureau archive, in order to shed more light on the first question.

1.2 General background to the incidence of literacy and numeracy problems in the adult population

Over the last 15 years or so concern has been voiced about problems with literacy and numeracy among adults in industrialised countries with universal compulsory schooling, rather than in developing countries where most people have no opportunity to learn literacy and numeracy skills. Britain, other European countries, the United States and Australia have all 'discovered' the problem. (See Harman and Hunter 1979, Lytle, 1986, ALBSU 1981). With worsening economic and employment situations, national concern has grown.

Although provision for bilingual learners may have already existed, it has often been difficult for countries that pride themselves on the quality of their educational system to admit to the general existence of problems with literacy and numeracy in their adult population (for the example of West Germany, see Fuchs-Bruninghoff, 1986).

In Britain, pressure from those working in adult and community education led to a government initiative and a recruitment campaign by the BBC. This resulted in a national network of provision that has grown over a 10 year period from virtually nothing and raised public awareness of the issue. The media campaign, in particular, was designed to reduce the stigma attached to having literacy difficulties and to encourage people to come forward for tuition. (See ALBSU 1985).

However, far from being a temporary problem that could be eliminated in a few years, there is every indication that the need tapped by the campaign is the tip of a much bigger iceberg. Demand for tuition shows no signs of decreasing and, indeed, while opportunities for tuition are severely limited by lack of funding, publicity often results in waiting lists of potential students.

The extent of the need and its existence in all industrialised countries suggests that this is a structural problem that needs to be understood in a broad, cultural context and not simply a remedial problem that can be solved on an individual basis.

1.3 Evidence about adult literacy and numeracy

The British campaign worked on an informal estimate of 2 million adults with literacy problems. What evidence do we have on standards of literacy and numeracy in the adult population, that might tell us about the accuracy of the 2 million estimate? Policy makers and funders would like a simple answer to this question, but the question itself is not as simple as it looks at first glance. There

is no obvious measure of literacy and numeracy that we can use to assess adult levels of competence.

We know that what counts as 'being literate' in one society or time-period may be very different from another. It is difficult to standardise across different cultures and countries (Gray 1956, Downing, 1973). Objective measures of skill change too, and what we expect of ourselves, what is seen as the norm. At one time it was sufficient to be able to sign your name in order to be counted in official statistics as literate (see Dobson 1984). Sometimes a whole generation of people have to deal with changes in the system of literacy and numeracy they have learned, as when a new script is introduced into a society, or as with the introduction of metric measurement in Britain. Societies, then, demand different things from people under different circumstances. At times of rapid social and economic change, this is particularly relevant since the demands and values placed on literacy and numeracy may be changing too.

It is generally accepted, for both literacy and numeracy, that they cannot be defined solely in terms of a set of technical skills. According to the Cockcroft Committee (1982) a definition of numeracy must include being 'at-home' with numbers, the ability to estimate and approximate and to critically assess numerical information. Literacy, too, is primarily about communicating, assessing and organising ideas through the medium of written language.

How can we capture such notions in a workable definition of literacy and numeracy? Various strategies have been tried. These include monitoring levels of literacy and numeracy among school leavers, using standardised tests; inventing standards of 'functional literacy' and numeracy based on everyday tasks that adults have to carry out; and asking adults themselves for their own definitions and assessments of their competence in literacy and numeracy. There are drawbacks to all these approaches.

Within Britain, there have been regular attempts to monitor standards of literacy attainment among school leavers (Start and Wells, 1972, Vincent, 1986, Rodgers, 1984). For many years this involved monitoring reading levels only. The more recent work of the Assessment of Performance Unit (APU) has included a wider range of literacy measures including a variety of writing tasks. One problem with these studies is that school curricula change and tests get out of date so comparisons over time are fraught with difficulties. In addition, they tell us about school attainment and priorities in competence but not about how this matches with the needs of adult life, arguably more important for assessing probable demand for adult basic education.

A series of studies in the United States at the University of Texas attempted to measure 'functional literacy' and to establish an adult performance level (Northcutt 1974) and a British study of numeracy in adults (ACACE 1982) adopted a similar approach, offering examples of everyday problems and reporting the numbers of people who solved them accurately. The drawback with this approach is that such competences vary from task to task and may not be relevant or representative of the problems faced by people outside the community (or time) they were originally designed for. Those interested in standards usually want something of general applicability across different groups. Measurements of functional literacy or numeracy are not easily generalised in this way.

Other studies in adult literacy in Britain have concentrated on people who have come forward for tuition (Charnley and Jones, 1981, NARE, 1971, Levine, 1986, Gorman, 1981), reporting on who students are and the difficulties with literacy and numeracy they face. Such studies can be very misleading. They have typically reported on small groups of adults who do not represent the full range of adult students. In addition, there is no guarantee that those who come forward for tuition are representative of those who do not.

By definition, these studies cannot tell us about those with problems with literacy and numeracy who do not come forward for tuition but this invisible group – of likely takers – is of equal interest to those offering funding or practical help with basic skills problems.

The great strength of the study that is reported here is that it has evidence of a representative sample of young adults and can therefore begin to make visible those who may have difficulties with literacy and numeracy but who have had no contact with adult literacy schemes.

1.4 Understanding literacy and numeracy through the National Child Development Study.

The 'basic skills' group that is the focus of this project is a group of people who have been brought together by their own reports or judgements about their difficulties with literacy and numeracy in adult life. Our main measure of literacy and numeracy is, then, a self-report, a first-hand account of experiences with reading, writing and numeracy. As such, it has the special validity of the first-hand experience and is the kind of information that is all too often missing from discussions about 'standards' of educational achievement.

Like other kinds of measures, self-reports have both strengths and weaknesses which could lead to over or under reporting of problems. Self-report will reflect the relative nature of difficulties with reading, writing and numeracy – the degree to which people feel difficulties are important in their lives. It may be affected by how people feel about themselves when interviewed, by the stigma that is attached to admitting to difficulties with literacy or numeracy. Reporting difficulties may also have been affected by the publicity given to adult literacy through the campaign of the last ten years.

These self-reports do identify a group of people who recognise and are prepared to admit to having difficulties with literacy and numeracy. They are therefore a group most likely, perhaps, to take up opportunities for developing their skills.

There are several other measures of literacy and numeracy standards and abilities in the earlier NCDS data, including tests, and teachers', parents' and children's assessments of their achievements at different ages (See Appendix C).

We have taken the approach in this project that each of these measures is important in its own way; that each gives us a 'window' onto literacy and numeracy and picks up a different aspect of what it might mean to feel or be judged as competent in these areas within our society. From the beginning, the possibility of looking at the relationships and divergences between these different measures has seemed to us to be of central importance in understanding what literacy and numeracy are all about.

In this project we aimed to build up a picture of this group of young adults who report basic skills difficulties and of how their lives are similar to, or different from, the rest of the people interviewed who did not report such difficulties. We want this picture to move us away from the idea of the adult literacy or numeracy student as an 'individual with a problem'. We are aiming for a broader understanding of the different uses of literacy and numeracy in people's lives and the other factors in their social and educational background that have shaped their experience and skills. (See Mace, 1979; Cook-Gumperz, 1986; Street 1984; Richmond, 1985, Hamilton and Barton, 1985).

Extensive information is available from previous sweeps of the NCDS about the educational, occupational, health and social background of the cohort at periodic intervals through childhood and adolescence. During early sweeps information was obtained from school and medical reports and from parental interviews. In later sweeps the young adults themselves were interviewed.

Census data has been linked in to give detailed information of the geographical location and type of housing area for all respondents.

The NCDS was not set up specifically to look at questions about literacy and numeracy, its purposes are far wider that this. The questions about literacy and numeracy that were included are, therefore, necessarily brief.

The survey has collected a wide range of other information over the years and there are many publications which have explored the patterns of results in educational attainment, health, family and social background of the cohort. (See Fogelman, 1983, NCDS User Support Group, 1985). These publications provide important background material for understanding the results of the current project.

These people were 23 years old in 1981. They would have left school between 1974 and 1976, and were the first children to have compulsory schooling until the age of 16 years. Schools have changed since then, especially the organisation of provision for children with special needs. Moreover, there have been a number of developments in school curriculum policies which have emphasised the need for relevance.

1.5 What this project has achieved

This report has something to say in answer to all three of the original questions, although our ideas of what was feasible and useful to do changed during the project as we looked in more detail at what the data offers.

Question 1. What are the practical problems that people with literacy and numeracy difficulties report most often?

We found that the practical problems people faced had been meticulously recorded and coded by previous NCDS Staff and our task of obtaining the verbatim transcripts was easier than expected. Existing variables derived from the transcript seemed wholly adequate and we report on them in detail here. In addition, examples of verbatim quotes are to be found in the report. We were able to go further than originally planned and take down details of employment experience given by all those who reported practical problems and all those who had obtained tuition in literacy or numeracy skills. Since many of the practical problems people referred to seem related to their work, juxtaposing employment details with literacy and numeracy problems is quite revealing. See Appendix B.

Question 2. Are there particular groups of people who report difficulties with basic skills but who are under-represented on courses at the moment?

The figures presented from the adult data fill in many aspects of a picture of the group of adults reporting problems with literacy and numeracy, and these descriptions draw attention to particular groups to target for ABE provision. We did propose to compare those adults who had tuition in basic skills with those who reported problems but did not have tuition but this question turned out to be very unreliable. It has three main drawbacks:

1. Tuition was not necessarily ABE tuition, but might have referred to some general course of education or training which had elements of literacy or numeracy within it.

2. Some people who had had individual tuition might not have identified this as a 'course' and so these students would be under-represented.

3. Many people who did not report problems with basic skills said they had attended courses to get better at reading, writing and maths. In the case of maths this group was over 50% of those who had attended courses. This is further evidence that people were not always referring to ABE tuition.

The unreliability of this measure, plus the small numbers involved, reduced the usefulness of detailed comparisons. It may still be possible to do this by examining individual histories of people classified in this tuition group at a later date.

Question 3. Can we predict who will have difficulties with numeracy and literacy skills in adulthood?

Because of the breadth and detail of the data in the NCDS we have spent most of the available time in the project on the descriptive mapping of relevant variables, using crosstabulations to identify patterns in the data. We have only begun to touch on the possibilities of predictive modelling*. This was anticipated at the start of the study because of the short time-scale. We do report enough results about earlier experience to suggest, we hope, the importance of pursuing it further.

Finally, while working on the data we have discovered some constraints on what it is able to tell us. It is worth noting these here:

(a) Ethnic minorities in Britain are not properly represented in the data and for

*Details of modelling techniques used in this project are available in a short paper by Mikis Stasinopoulos from the Centre for Applied Statistics, University of Lancaster.

this reason we have not carried out any analyses specifically to look at these groups.

(b) Some groups within the cohort are so small that we cannot say anything useful about them, for example those in long stay hospitals or prison.

(c) Over the years loss of some members of the cohort is inevitable in a longitudinal survey. This may result in some bias in the data that is collected at later stages. In the NCDS such biases are relatively small and do not seriously affect the information we present here. Since the groups most likely to be lost over the years include those who are more likely to experience basic skills difficulties in adulthood (those who have experienced social, economic and educational disadvantage) the estimates we present here are likely to be conservative. (The issue of response bias is covered thoroughly in NCDS working paper No. 25, Iyer, 1984).

1.6 The numbers are the people

Finally, while we aim to understand literacy and numeracy in a broad context and look for trends and generalisations, we must not lose sight of the people who contributed to this study.

In a survey of this kind there is a very real danger of stereotyping the people who report basic skills difficulties. All that we see are group averages and statistics summarising the immense variety of individual lives. In particular it is hard to keep in sight the meaning of group differences: we say, for example, that there are more lone parents than we would expect in the group of people reporting basic skills problems, but still the vast majority of people in the group do not fit this description. We say that most people reporting difficulties come from manual working class backgrounds – but there are many people from similar backgrounds who do not have difficulties.

We need somehow to shift back and forward between the group and the individuals making up that group. For that reason we have included, where possible, quotes from the original interviews as a balance to the statistics and as a help to keep in mind the people behind the figures. Appendix B contains selected 'profiles' of some people who reported difficulties with literacy and numeracy.

Interested readers are also recommended to read some of the excellent collections of writing from adult literacy students about their own lives and experiences (e.g. Gatehouse 1983). These writings can highlight areas of experience

not tapped by the survey data and make connections between events that it is not easy for us to do in a large scale study.

They can also balance out the picture of people who may have difficulties in one area of their life, but who also have strengths, interests and responsibilities as varied and impressive as any other group of adults.

For those people who have been working within ABE, many of the results we report here may support the intuitions they have from their own experience. These results are still important for convincing others outside the field, destroying misleading stereotypes and helping people understand the realities faced by those involved in ABE both as teachers and learners. There are also unexpected findings which may help us understand better the problems faced by young adults in Britain with literacy and numeracy and make the service we offer more relevant.

1.7 How the findings are organised in this report

We have organised the findings into 5 main sections. The first section answers the question 'what are the problems people report in the NCDS data?' The next two sections provide information about who the adults are reporting difficulties, and the final two sections look back at the earlier experience of this group of young adults, both in school and out.

At the end of the report we draw together the findings from all these sections into a list of conclusions. Readers wanting a quick overview of the main findings should turn to this concluding section first.

Each topic is explored by contrasting the basic skills group and the rest of the cohort, sometimes by type of basic skills problem reported (reading, writing or numeracy). We then comment on any important variation by gender, any information on those who have had tuition and on how level of qualification affects the pattern of results for the basic skills group.

Differences between the basic skills groups and the rest of the cohort are reported only if they are statistically significant at the 1% level, (using an F-ratio or X^2 value where appropriate). That is, where we can be fairly certain that the differences we have found in the data are not due to chance.

Main points are made in the text. Supplementary information essential to understanding the text is contained in the appendices. More detailed tables and information about statistical techniques used in the project are available from us at the University of Lancaster.

Section 2:
WHAT ARE THE LITERACY AND NUMERACY PROBLEMS PEOPLE REPORT?

This section describes the type of difficulties with literacy and numeracy that people reported in the NCDS at age 23 years. It looks separately at the percentages of people with difficulties in reading, writing and numeracy and whether the same person is likely to experience more than one kind of difficulty. It then goes on to look at how difficulties impinge in practical ways on people's day-to-day lives and what levels of difficulty people experience.

2.1 Basic Figures

Figure 1 gives details of the groups we compared in the 1981 survey:

- The total number of people interviewed at age 23 years was 12,534.
- Of these people, 13% (1676) reported difficulties with reading, writing or numeracy since leaving school.
- Out of this group of people only 8% (132) said they had attended courses to help with reading, writing or numeracy since leaving school – less than 1 in 10 of those with problems.

Figure 1
Groups to Compare

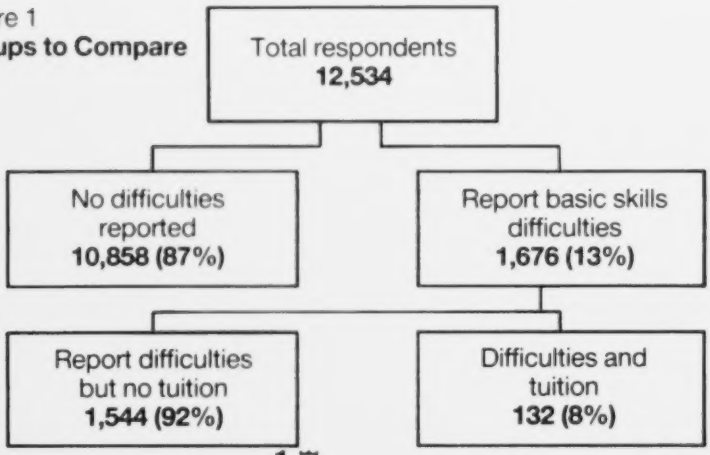
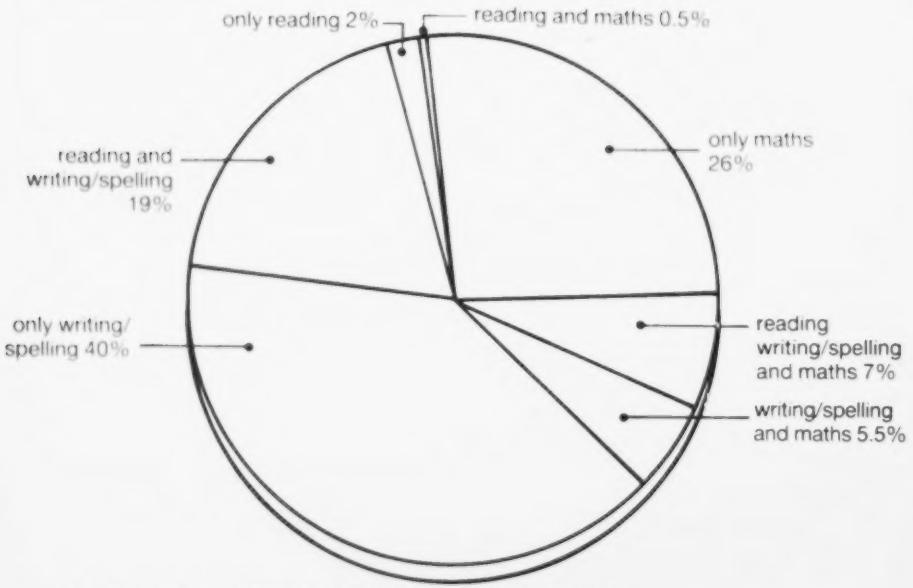


Figure 2
Reported Basic Skills Difficulties



The distribution of the 1676 individuals with difficulties.

The pie chart (Figure 2) shows the type of difficulties people reported at age 23 years.

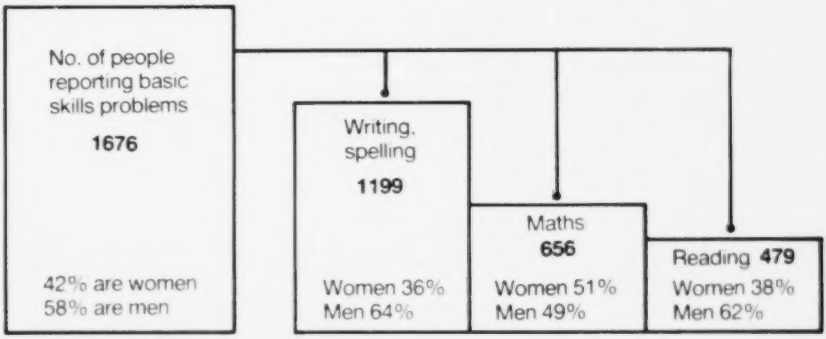
- 40% of the group mentioned only writing difficulties.
- A further 19% reported reading, and writing difficulties.
- 26% mentioned only having difficulties with number work.

The remaining people reported having difficulties of more than one type and 7% said they had difficulties with all three – reading, writing and maths. There is, therefore, a good deal of overlap between the type of difficulties reported.

Figure 3 shows that the pattern of difficulties reported was different for men and women.

- Of the 13% reporting difficulties, more were men than women. 980 were men (58%) and 696 were women (42%).
- Men were more likely to report reading and writing problems.
- Men and women were equally likely to report numeracy problems.

Figure 3
Percentages of women and men reporting different types of basic skills problems



When we look at figures for people who said they had attended courses to help with the difficulties they had, the numbers are low. In particular we find that women are very few indeed.

Table 1: Men and women reporting basic skills difficulties who had attended courses to help with literacy or numeracy

No. of people who had attended courses	*Had literacy difficulties and attended courses to help with reading or writing*	*Had numeracy difficulties and attended courses to help with numeracy*
Women	23 out of 442 (5%)	8 out of 334 (2%)
Men	75 out of 787 (10%)	52 out of 317 (10%)

Men were twice as likely as women to have received help with reading and writing difficulties and 4 times as likely to have received help with numeracy.

2.2 Practical difficulties reported with reading, writing and numeracy and things prevented by them.

This section looks at people's responses to questions about everyday difficulties caused by literacy and numeracy problems. (See Appendix A) Details were

given by only about 1 out of 3 of those in the basic skills group: in other words, the majority of people who reported problems with literacy and numeracy were silent when it came to the detail of everyday practicalities and many more were not at all specific in their comments. We need to bear this in mind when assessing the importance of these responses.

It is possible that more sensitive interviewing would have produced different results. Those who were silent about practical difficulties may have experienced general feelings of failure from their past experiences in education. It is also possible that many people in this group have developed ways of coping with or avoiding everyday difficulties.

Several people hinted at this general feeling of failure and lack of confidence. This is to do with not having skills which are assumed and given high value by our society (see Willis, 1984).

As the interviewer noted for one person:

> *'He would like to read for general convenience and greater confidence. He feels he is looked down upon by certain people because of his inability to read'.*

This is certainly an important dimension beyond the specific practical difficulties caused by reading, writing and maths problems and may account for the finding that people studying in adult basic education gain self-confidence as, indeed, do many mature students (see Charnley and Jones 1981, Woodley et al 1987).

2.2.1 Practical difficulties with literacy

Table 2 shows that the practical difficulties most frequently mentioned are in connection with work. These are largely reported by men:

> *'Form-filling, reading from notice boards at work, reading safety regulations at work and any other things required to get information. I usually have to ask other people what the notices say.'*

> *'Taking messages by phone. I can't write them down properly. On a motorway I can't read the signs. At work I have problems with filling in the shipping sheets and things.'*

> *'Writing out MOT certificates, booking in work into the diary.'*

'When I dictate a letter I can't check the letter back because I can't spell properly myself. There is a problem if I can't see if its spelt right or not.'

'I went for a job as an ambulance driver and the writing and spelling let me down on it. It stops me getting a better job, a more secure one.'

Table 2 Do your literacy problems make anything difficult for you in everday life? What things in particular are made difficult for you?

Type of Difficulty Reported	*Number reporting difficulties*
At Work	22%
Getting Jobs	10%
At Home - Children	2%
H-Hold Management	2%
Other Context	2%
No Spec. Context	74%
Leisure Arts	7%
Total	359 (100%)

Missing Values:
This question was answered 'yes' by 29% of the group who reported problems with reading and/or writing.

'If your handwriting isn't much cop it stops you getting a job. They just throw it into the wastepaper basket when you fill a form in.'

Other contexts mentioned by people (especially women) are activities with children and home management:

'It's embarrassing – very embarrassing in so many ways. For instance, if I send the kid to a shop I can't write out what I need – I can't spell. I'm a nice writer but I can't spell.'

'My children are starting to read and I can't read stories to them.'

'I'd like to help my daughter better with her school work. I can just cope at the moment but I won't be able to soon.'

'When writing to a solicitor and filling any form in. I've just been buying a house and I don't know what all the forms mean.'

'Writing out cheques. Reading bills. I can't understand them.'

Many people mentioned wanting to be able to read books and magazines for pleasure, doing crosswords and reading and writing letters between friends and relatives:

'Reading newspapers and books. My sister reads to me most nights and I have to try and remember the stories.'

'I try to read books but I don't get any difficult words from them. If letters come someone has to read them for me.'

'I'd like to explain myself in words rather than just pick the phone up. My mother would know more of what I'm thinking then.'

Though many people did not mention a specific context, large numbers talked generally about their difficulties with letters and form-filling, which affected many different aspects of their lives.:

'When I fill in forms I have to print and I have the DHSS checking my signature often as I have to print it.'

'When I write a letter. So, I don't often write them. I get my husband to write them.'

'When I go to fill in forms and that, I wouldn't be able to fill them in, my address and all that. I'm not able to read the forms.'

'When I want to write a letter I can't spell and they can't read my writing.'

Seven per cent of those who reported literacy difficulties had severe problems: that is, they reported that they were unable to read or write at all:

'I'm frightened if someone comes to the door with anything that has to be read. I couldn't fill in an application form for a job if I wanted to. If anyone comes to the door I have to take them down to my dad so that he can read it for me. I can't read at all. It's difficult finding work because I can't read anything on a job paper. I can't read or add up numbers. I have to leave it all to my dad.'

2.2.2 Practical difficulties with numeracy

Table 3 shows the practical numeracy difficulties that people mentioned.

Table 3 Do your numeracy problems make anything difficult for you in everyday life? What things in particular are made difficult for you?

Type of Difficulty Reported	*Number reporting difficulties*
At Work	32%
Getting Jobs	8%
H-Hold Management	27%
Doing Courses	2%
Other	1%
No Spec. Context	29%
Leisure Arts	1%
Total	184 (100%)

Missing Values:
This question was answered 'yes' by 28% of those who reported having problems with number work.

Numeracy seems to impinge on household management more than literacy does. For women, it's the most important context mentioned, but employment still predominates for men. Examples of difficulties in the household were:

'Measuring up carpets and curtains.'

'I have difficulty in reading meters and finding out how much electricity I have used.'

'I have to have the milk money exact before he calls or I don't know if he is charging me right.'

When I go into a shop I try to add up the things I've got and if I get it wrong and I haven't enough money I'm embarrassed. Also, I can't check my change very well.'

Examples of difficulties at work were:

Getting the sales prices right when I worked in the men's shop – taking 10% off the items was difficult to work out percentages. In the job I do now we take a block number pumping water through a special gauge and you have trouble with reading it if you lose the number.'

'In my job I'd like to be able to do drug dosages better, be quicker in working things out. I can work them out but it takes me longer than the others.'

'When I'm working on the till I forget how to take away one amount from another.'

'I can't get jobs where you have to add up – bingo, bars in pubs, clubs, etc. I could have more of a chance of a job if I could add.'

One in ten people mentioned difficulties in getting jobs, or doing courses:

'I could have taken a management course in hotel work, but I know I couldn't cope with the accounts. I'd be too slow. I can do them but it takes me a very long time to work out percentages and things.'

'When going for interviews and you get a maths test I go to pieces and I just can't do the sums. I can do the basics but when it comes to multiplication and long division I can't do it.'

'I cannot seem to do fractions, etc. I wanted to be a joiner and I found the learning of the maths required for this in a week's TOPS course very difficult.'

A number of people specifically mentioned entrance to TOPS courses as presenting a problem.

People who mentioned leisure activities talked about darts, snooker and pool. Other hobbies were also mentioned:

'I design musical instruments – I couldn't work out the angles. I find maths most difficult when related to practical physics.'

Of those who mentioned specific problems with numeracy, over half (56%) said they had difficulties with the basic operations of adding and subtracting or couldn't do anything at all with figures. This is 15% of the whole group of people reporting numeracy difficulties.

Some people mentioned metric measurement:

'The new metric system gives problems. I can't understand it. It is difficult when things are priced and sized in metric as I don't understand it.'

Others made the distinction between mental arithmetic and using various aids for working out sums:

'When I am working out any figures for the catalogue I have a struggle. I run a mail order catalogue. I use a calculator now and manage alright.'

'I find it difficult to add up quickly in my head. I'm not too bad on paper but not in my head. It's difficult sometimes if they want me to check things at work.'

2.2.3 Things prevented by literacy and numeracy difficulties

Table 4 shows the things people said were prevented by literacy and numeracy difficulties. Access to jobs and courses are the most important contexts mentioned and these were just as important to women as to men. Just over half the men and women who answered this question mentioned obstacles of this kind. They were frequently jobs that needed an entry test of some kind (nursing, police, or the army, for example).

'I am a photographer but I am prohibited by any spelling from rising to a managerial type of job.'

'I get lost with the figures – the more I'm wrong the worse it gets. I can't get jobs involving number work.'

'When I went for a barmaid job I can't add up. It's a problem getting a job which depresses me a lot.'

'If its a job that needs maths, I'm off the list.'

'There's plenty of shopwork going and I can't do it. When it comes to forms and things I can't do the number bits.'

'I tried to get on a government TOPS course as a bricklayer and I failed the first test. I had nine sums to do in five minutes out of about 20 and I couldn't work fast enough.'

Table 4 Things literacy and numeracy problems prevent. Is there anything you would like to do that you feel lack of reading or number skills prevents you from doing?

Type of Difficulty Reported	*Number reporting difficulties*
Access to Jobs	52%
Training	13%
Promotion Prospects	6%
Finding Jobs	1%
Kids' Activities	2%
Access to Courses	5%
Other	13%
Irrelevant	3%
Leisure Activities	6%
Total	343 (100%)

Missing Values:
This question was answered 'yes' by 20% of those who reported having problems with literacy or numeracy.

'I have difficulty writing letters – it's my command of the language that's the problem. It's difficult when you've got 2 languages. I still have to speak Turkish to my mum. My Assistant general manager told me the other day I'll go far but my command of the language could let me down.'

'Getting an apprenticeship of any kind and getting a better job that requires reading skill, so I'm confined to manual work.'

The ambitions people had were very wide, some more easily attainable than others and some that were apparently more closely related to literacy and numeracy skills than others. A variety of courses were mentioned including technician courses, photography, engineering, typing and 'A' levels:

'It stops me from getting my pilot's licence. I want to fly with the RAF.'

'I'd like to go to college and get some 'A' levels. I can't because I haven't got maths and english.'

'I would like to work in shops or an office doing nice things – the sort of things they do on the telly.'

'Being a physicist. Working in a scientific field. Physics was my main subject at school.'

'I have always fancied writing a book, a novel, but I have not sufficient command of the English diction to be able to do this.'

'I'd have liked to take up veterinary work if I had had the brains for it.'

'Poetry and songwriting.'

For some people there was the general feeling of having missed out, that there were more things they might have done:

'I haven't had the opportunity to train other than as an upholsterer. I don't know what I'd like to have been, but I feel I haven't had the opportunity.'

Asking adults to report in detail about their everyday uses of literacy and numeracy is a rich source of information. The comments given in the NCDS were very brief because of the breadth of topics covered by the interview. They do indicate, however, the variety of uses of basic skills and the feelings that people have about literacy and numeracy. Future research in this direction would be well worthwhile.

Section 3:
EMPLOYMENT, QUALIFICATIONS AND TRAINING

This section looks at current concerns about the employment and economic situation of adults with low levels of competence in literacy and numeracy. It is often assumed that having difficulties with basic skills restricts people to unskilled, low-paid and insecure work. We set out here to examine the job situation, prospects and problems faced by those reporting basic skills difficulties.

Since educational achievement and access to training are closely connected to the jobs people have, we also cover these topics in this section. We are not in a position to give a causal explanation of the relationships we report: we are only able to describe associations between factors.

3.1 Occupational experience

We look first at the type of jobs people have done since leaving school, the entry requirements of their current jobs and the industries where they are employed.

3.1.1 Socio-economic group

Do people with basic skills problems cluster in particular kinds of jobs? Yes, clearly they do. We have a composite index* based on all the information we have about a person's employment history. (See Tables 5a and 5b).

Occupational experience has been coded according to the categories used in the Registrar General's classification of Socio-economic groups (1980). This classification gives more information about the type of job that people do than a simple social class breakdown.

We also looked back at the original interviews for descriptions that people gave of their employment to get a more exact idea of what they were doing, day-to-day.

Among women, personal service jobs, skilled and semi-skilled manual jobs are over-represented among those reporting basic skills problems. Among men

personal service, foremen, all manual workers and agricultural workers are over-represented.

The predominant groups are manual workers, if we include skilled, semi-skilled, unskilled and service work. This is true for both men and women, though the pattern of work within these categories is very different for men and for women.

Personal service jobs, largely done by women, include domestic and catering work, working in hotels and bars, hairdressing:

Table 5a Employment Experience: Current or last job of women in the cohort

	No Problems	*Basic Skills Problems*
Professional	291 (5%)	16 (2%)
Inter Non-Manual	1414 (25%)	89 (13%)
Junior Non-Manual	2245 (40%)	202 (29%)
Personal Service	492 (9%)	90 (13%)
Foreman Manual	36 (1%)	8 (1%)
Skilled Manual	207 (4%)	35 (5%)
Semi-Skilled Manual	567 (10%)	176 (25%)
Unskilled Manual	83 (1%)	28 (4%)
Own Account	62 (1%)	12 (2%)
Agricultural Workers	40 (1%)	9 (1%)
Armed Forces	14 (1%)	—
Never Employed	106 (2%)	28 (4%)
Total	5557 (100%)	693 (100%)

Table 5b Employment Experience: Current or last job of men in the cohort

	No Problems	*Basic Skills Problems*
Professional	649 (12%)	50 (5%)
Inter Non-Manual	655 (13%)	39 (4%)
Junior Non-Manual	701 (13%)	61 (6%)
Personal Service	101 (2%)	20 (2%)
Foremen Manual	325 (6%)	92 (9%)
Skilled Manual	1390 (27%)	333 (34%)
Semi-Skilled Manual	557 (11%)	180 (18%)
Unskilled Manual	235 (5%)	88 (9%)
Own Account	244 (5%)	41 (4%)
Agricultural Workers	126 (2%)	31 (3%)
Armed Forces	120 (2%)	22 (2%)
Never Employed	125 (2%)	19 (2%)
Total	5228 (100%)	976 (100%)

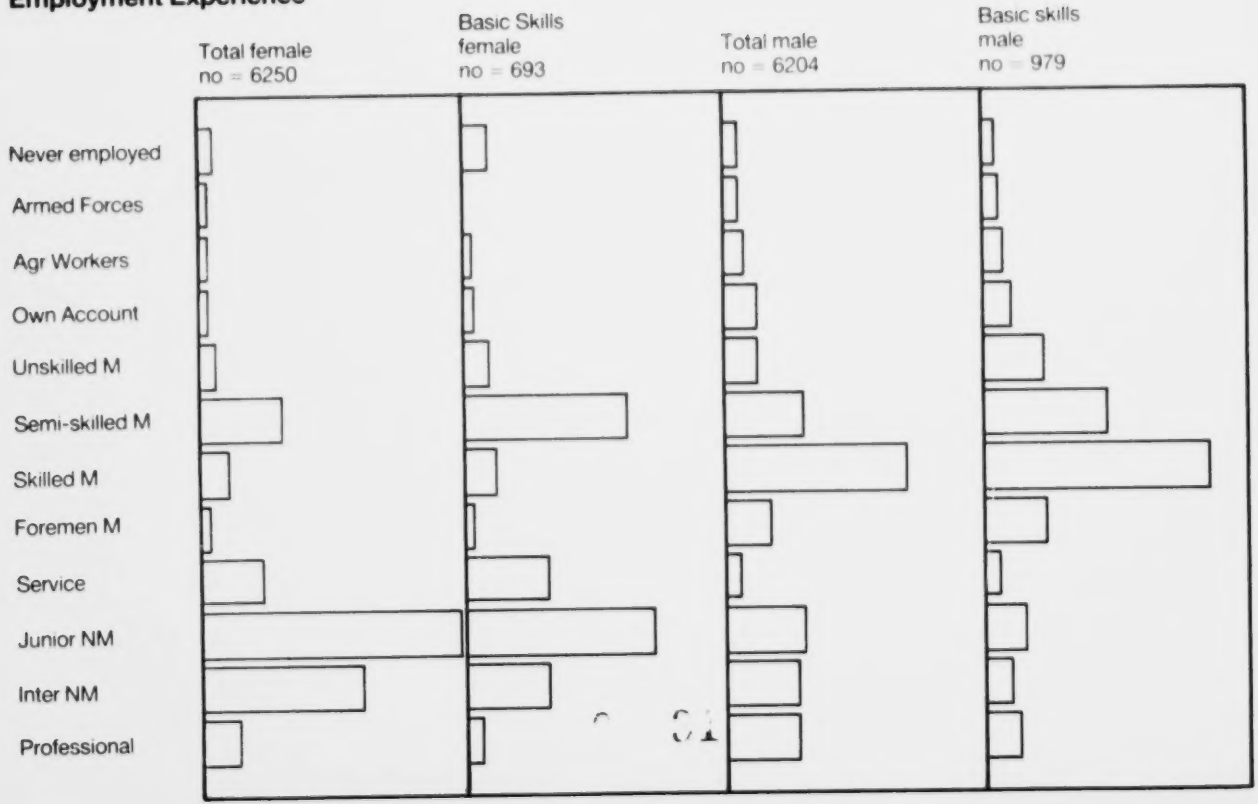
Based on the Registrar General's 1980 classification of Socio-Economic Groups.

'I worked as a chambermaid and waitress. I had to make the beds. There was cleaning up and waiting tables in a boarding house. You had to be able to serve 'silver service'. An amount was deducted for board and lodging.'

'Waitress, kitchen assistant, food preparation, restaurant serving, laying tables, washing up, etc. It was a hotel, public bar and restaurant.'

'Gents hairdresser. Cut and blow dry, using scissors, hand dryers and clippers.'

Figure 4
Employment Experience



Because of the different occupational distribution for men and women, the number of women with basic skills difficulties who are classed as having intermediate non-manual occupations and junior non-manual jobs is much more important than for men. 42% of the women reporting basic skills difficulties were doing this kind of work. Typically, women classed in the intermediate non-manual group were working as state-enrolled nurses (SEN's). Other jobs that came under this heading were trainee animal nurse, a designer and photographer and a manager of a hi-fi shop.

Junior non-manual jobs include secretarial and clerical workers, cashiers, receptionists, sales staff and shop assistants.

'Sales assistant in a shoe shop – serving in the shop, putting stock away. It was a retail shoe shop, one of a large chain.'

'Export clerk, dealing with paperwork for exporting goods from this country for air flight, and sea freight. I used a calculator, photocopier. It was a company making and selling scientific apparatus.'

'Representative, selling the company's work. Worked for an art and photographic studio. I had to find new clients i.e. advertising agencies to sell them the company's work.'

'Junior insurance clerk, checking insurance policies and working out allowances. Checking files. I dealt with different kinds of insurance (life, shipping, etc).'

There was a great variety among the manual jobs that people have. Women were working as cleaners, punch card operators and window dressers. There were machinists and those working in food processing factories:

'Factory worker making fruit bars and packing yeast – health food business.'

'Packer for a whisky manufacturers: packing whisky bottles'.

'Chargehand, supervising food processing workers making pies: making sure they get on with the work and do things right.'

'Sewing machine operator – making ladies dresses.'

Some had other specialised manufacturing jobs:

'Tambour beading – I work by hand using a tambour hook and a frame to make evening garments at home.'

Men worked in a variety of trades as plumbers, joiners, mechanical technicians, fitters and others:

'Apprentice instrument maker making aircraft instruments and equipment. This involved a full-time college course for a year and 3 years further apprenticeship with day release.'

'Apprentice signwriter, painting boards, lettering vans and making signs for shops and other businesses.'

Some had supervisory jobs as chargehands or foremen and some were delivery or heavy goods vehicle drivers:

'Land foreman, agricultural engineer: use mobile cranes, supervise loading and unloading of agricultural implements.'

There was also a range of less skilled labouring and agricultural work:

'Labourer, pipe laying and road laying using tractors.'

'Stable lad, mucking out horse boxes and brushing horses in a racing stables.'

'Nursery worker, planting seedlings, weeding and transplanting.'

'Farm labourer, driving tractor, feeding animals, cleaning cow sheds and milking.'

'Packer and storeman – unloading stock from lorries, clearing stock and doing special packing of typewriters.'

'Assistant to fish merchant. Packing and weighing fish, loading lorries, sorting fish and buying and selling.'

3.1.2 Industry of employment

Table 1 in the appendix shows how the employment of 23 year olds was spread across the different industries. There are more people reporting basic skills problems than we would have expected in the catering industry, in construction and in 'other manufacturing industries' which includes the food processing industry where many people in the basic skills group worked.

This information is useful for employers and trade unions who may need to pay particular attention to the basic skills needs of workers in their industries.

3.1.3 Entry requirements of jobs people do.

More people reporting basic skills problems were currently employed in jobs that had no entry requirements than for the cohort as a whole.

- 58% (but only 41% in the rest of the cohort) were employed in jobs that had no entry requirements. This is around the same percentage as those in the group who have no formal qualifications.
- 11% required general academic or technical qualifications.
- 12% required specific training such as apprentice or secretarial skills.
- 3% needed a driving licence.
- The remainder (16%) required only on-the-job training or previous relevant experience or personal qualities.

In summary, the majority of those reporting basic skills difficulties were employed in manual occupations, including personal service jobs, which have no formal entry requirements. Many women in the group held low grade non-manual positions in shops and offices.

There is a wider variety of occupations reported here than in Levine's study of students in an adult literacy scheme in Nottinghamshire (Levine, 1986). He found that 'the past and present employment of the students interviewed was concentrated, without exception in semi-skilled or unskilled jobs.' A substantial number of men, in particular, in the current study were in more skilled manual work and had started out as apprentices.

3.2 Highest qualification achieved

What educational and training achievements had people got by the age of 23 years? Looking at the spread of qualifications within the group of people reporting basic skills difficulties can give us an idea of the level of difficulties they experience and the kinds of restrictions they may feel.

Table 6 shows the highest qualifications obtained by age 23 years, including those gained since leaving school. It shows a surprising range of qualifications among those reporting basic skills difficulties, indicating that we are by no means dealing with a homogeneous group of people.

- Of those people reporting basic skills problems, 58% had no qualifications (as compared with only 24% of the no-problem group). At the other

Table 6 Highest Qualification Ever Obtained by People Aged 23 Years

	Basic Skills Group	*No Problem Group*
1. No qualification or CSE grade 2-5 only	58%	24%
2. Apprenticeship only or 'other' qualification	4%	3%
3. Craft, 'O' level or equivalent qualification	30%	46%
4. Professional or 'A' level equivalent qualification, or degree	8%	27%
TOTAL (100%)	1631	10714

Footnote: This estimate is derived from people's own reports of their qualifications, aged 23 years. The estimate may be adjusted if exam data records were used to cross-reference it. In particular, CSE's appear to be under-mentioned, so an unknown number are included in the 'no qualification group.'

extreme, 8% of those reporting problems had 'A' levels, a professional equivalent or a higher qualification (compared with 27% of the no-problem group).

- If we look at the qualifications people had achieved by the type of basic skills difficulty they report, we find that people with writing and maths had a similar distribution to the group as a whole. However, those who report reading problems were a lower qualified group: 3 out of 4 of them had no qualification and very few (3%) had any qualification above 'O' level or craft equivalent.
- Overall, men were slightly better qualified than women. Women with maths problems are better qualified than men. Men with reading or spelling problems are better qualified than women. Women with reading problems seem to be a particularly low-qualified group.
- 93% of people in the basic skills group left school at the earliest possible opportunity. Clearly, then, many had achieved qualifications after leaving school. This is important to bear in mind when we go on to look at the distribution of post-school training later in this section.

3.3 Experiences of unemployment, redundancy and job security

Table 7 shows the economic status of the basic skills group when interviewed, compared with the rest of the cohort. The pie chart (Fig 5) breaks the figures down by gender. Among other things the figures show that 15% of those reporting problems were unemployed compared with 9% of those without problems.

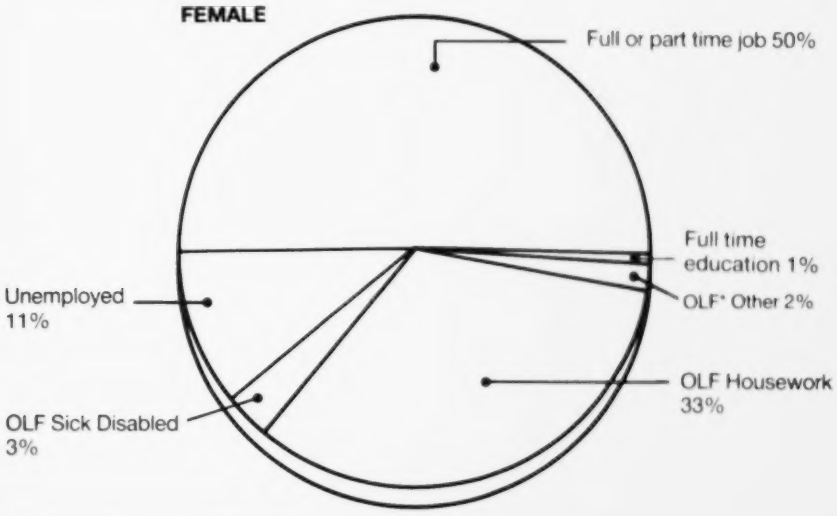
Table 7 Economic status of people in the basic skills group and in the rest of the cohort

Economic status:		*Basic Skills Group*	*No Problem Group*
Full time education		1%	3%
Full or part time job		66%	74%
Unemployed		15%	9%
TOPS course		<1%	<1%
Sick disabled	Out of the paid labour force	3%	<1%
Housework		14%	12%
Other		1%	1%
Total (100%)		1673	10834

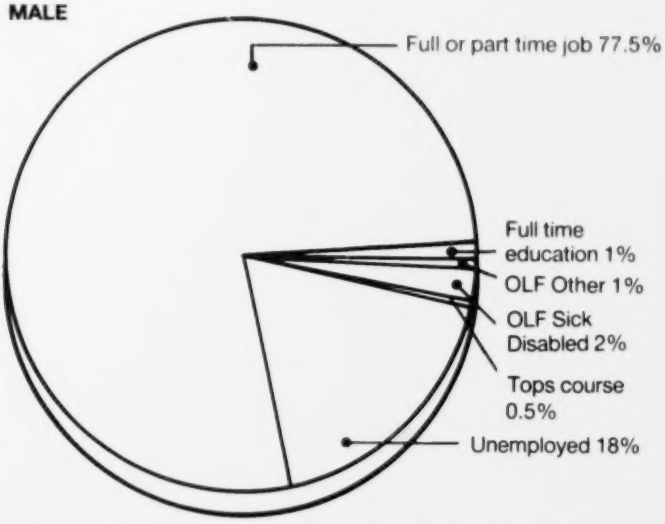
- The figures for men were 18% and for women 11% – both significantly higher than in the rest of the cohort.
- More people in the basic skills group were out of the labour force (OLF): the great majority of these were women at home caring for children, but there was also a significant minority out for reasons of sickness and disability – both men and women. If we look at total months out of the labour force, the mean is higher for the basic skills group (10 months compared with 7 months for the rest of the cohort). Women especially have a higher mean, but also men in the basic skills group.

Figure 5

Economic Status of People Reporting Basic Skills Difficulties



696 women reporting basic skills difficulties



*OLF: Out of Labour Force

980 men reporting basic skills difficulties

- Just under 3% of people reporting basic skills problems had never had paid employment. This figure compares with 2% in the whole cohort. The 'never employed' thus constitute a very tiny minority and probably overlap with the severely disabled group.

There are clear relationships between reporting basic skills problems and experiencing unemployment and redundancy. Those in the basic skills group were more likely to have been unemployed at some point and when interviewed, had experienced more periods of unemployment and these periods had been longer than for the rest of the cohort (average 6 months for the basic skills group and 3 months for the rest of the cohort).

Table 8 Percentage of those in the basic skills group and the rest of the cohort who had experience of short or long-term unemployment at some point during their working life.

	Basic Skills Group	*Others*
No unemployment	44%	56%
Short-term unemployment <12 months	40%	37%
Long-term unemployment	13%	5%
Never employed	3%	2%
Total (100%)	1676	10861

Table 8 shows that:

- 44% of people in the basic skills group had experienced no unemployment.
- 40% had experienced short-term unemployment.
- 13% had been out of work for longer than 12 months, at some point since leaving school.
- 3% had never been employed.

When we divide the basic skills group by level of qualification and by type of employment, there are predictable, strong patterns: the less qualified and

those in less skilled jobs were much more likely to have experienced longer and more frequent periods of unemployment. To take the two extremes: those employed in professional jobs with higher qualifications averaged 0.7 months of unemployment. Those in unskilled work without qualifications averaged 11 months as their longest period out of work. This means that if we take account of the type of work and the level of qualifications people had, the relationship between basic skills difficulties and unemployment becomes much less important, though it is still there.

People reporting basic skills problems had, on average, more jobs and their reasons for leaving jobs suggested more 'involuntary' change (closure of firm, redundancy and sacking) than for the cohort as a whole.

If we look at people's reasons for leaving their first job, 22% of those reporting basic skills difficulties had had to leave for one of these reasons, and only 12% in the rest of the cohort. Comparable figures for people leaving their last job were 29% and 18%.

These unemployment statistics come from 1981 and are likely to be much higher now. Those reporting basic skills problems, concentrated as they are in the most vulnerable types of jobs, are now particularly at risk.

However, many of the people reporting basic skills difficulties were in secure employment in 1981 and even now the majority of them would not be found in the dole queue. It is not true to say that people with basic skills difficulties cannot get or keep jobs.

3.4 Training and education post-school

Table 9 shows that fewer people in the basic skills group have experienced training or education since leaving school. Figure 6 gives these findings in more detail by showing the different patterns for women and men.

Those in the basic skills groups were much less likely to have experienced any education or training since leaving school (46% are in this situation, and only 27% in the rest of the cohort).

Figure 6
Post-school Education, Training and Apprenticeship

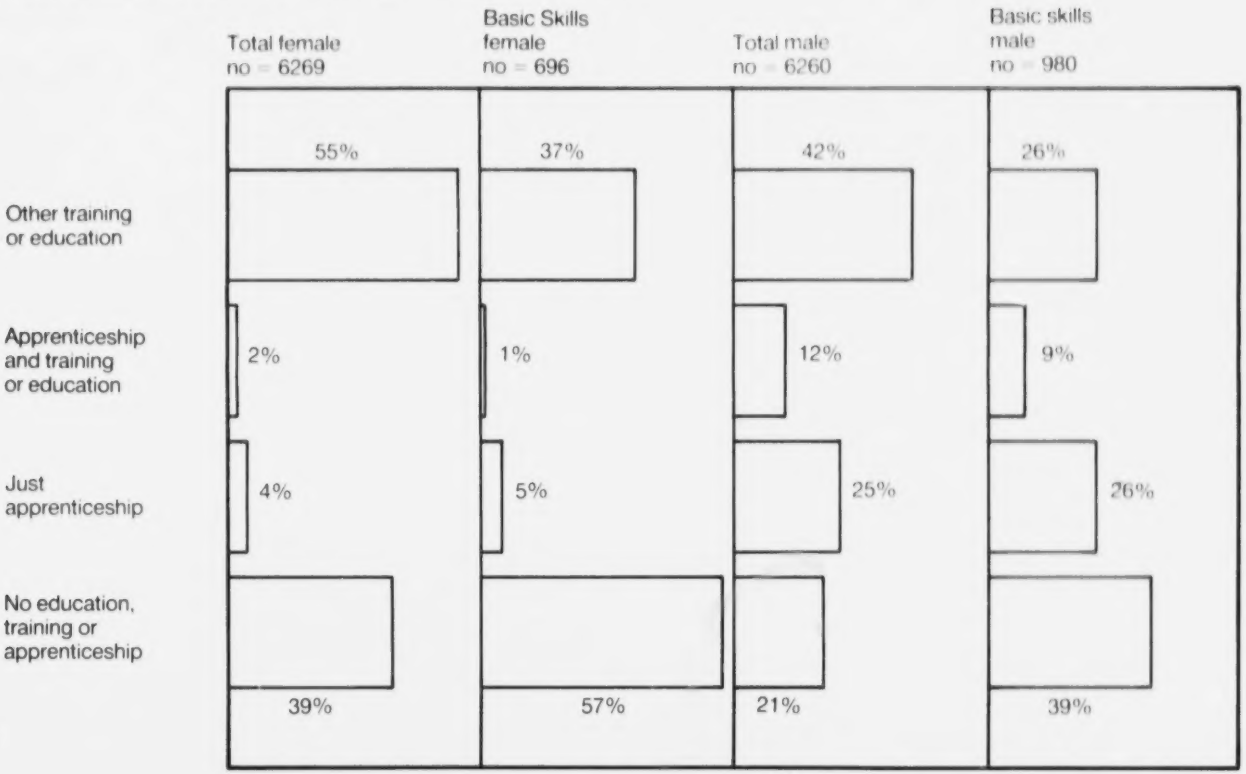


Table 9 Post-school education, training & apprenticeship

	No education training or apprenticeship	*Apprenticeship only*	*Apprenticeship plus training and/or Education*	*Other training or education*	*Total*
Basic skills group	46%	17%	6%	31%	1676 (100%)
No problem group	27%	14%	7%	52%	10853 (100%)

3.4.1 Overall patterns for women and men

- Women in the cohort as a whole were as likely as men in the basic skills group to be without post-school training and education. Women reporting basic skills difficulties were the worst off by far on this measure: 57% of them had no post-school education or training.
- 23% of those in the basic skills group (almost 1 in 4) had done an apprenticeship, with or without some other form of training or education. The great majority of these were men: 1 in 3 of men reporting basic skills difficulties had done an apprenticeship.
- Women were more likely to have done some other form of educational or training course than men in the cohort, but people (of either sex) in the basic skills group were less likely to have done such courses than people in the rest of the cohort.

3.4.2 Training that was not completed

Is there any evidence that having difficulties with literacy and numeracy affects people's success in training courses they have embarked upon?

Table 10 shows that more of the basic skills group had started on apprenticeships (due to the higher percentage of men in the group) than in the cohort as a whole, but they had a much lower completion rate.

This contrasts with their reports of other training courses, where the completion rate is similar for the basic skills and no problem group. Thirteen percent of people did not complete their first training course. The percentage goes down as people do more courses.

Table 10 Whether apprenticeship has been completed

	Percentage of group who had started apprenticeships	*Completed*	*Still doing*	*Not completed*	*Total who have started apprenticeships*
Basic skills group	23%	60%	1%	39%	386
Others	21%	71%	3%	27%	2274

The most frequent reason given for failure to complete a training course was 'left/changed job' and there is not enough evidence to suggest that more of the basic skills group failed to complete for reasons associated with their lack of literacy or numeracy skills.

3.4.3 Why were apprenticeships not completed?

- More people in the basic skills group had changed firm during their apprenticeship (44% v 33% in the rest of the cohort). This resulted in a change in their apprenticeship contract.
- Of those who had had a change of contract, 1 in 4 said their employer had terminated the contract for a variety of reasons. There was no difference between the basic skills group and others in this respect. In the basic skills group the reasons given were:

  10 people were made redundant — 8 firm closed down

  15 were sacked — 14 some other reason

- When an apprenticeship contract was changed for any reason, 4 out of 5 people abandoned their apprenticeship altogether. There was no difference between those in the basic skills group and those in the rest of the cohort in this figure.

We cannot be sure of the reasons for the lower completion rate from these figures. We know that those in the basic skills group were more likely to change firm during their apprenticeship and this in itself was likely to lead to the apprenticeship being abandoned. It may well be that moving job is as important a factor in non-completion as not being able to cope with the literacy or numeracy demands of the apprenticeship.

Section 4:
OTHER ASPECTS OF ADULT LIFE

In this section we report on other aspects of the lives of adults reporting basic skills difficulties that may be relevant to recruiting and designing appropriate educational opportunities for them.

4.1 Where do people reporting basic skills difficulties live?

We have looked at the different regions of Britain and at the types of community that people in the cohort lived in, to see whether people reporting basic skills difficulties were concentrated in some areas. The findings are shown in Tables II and III in the appendix.

We expected, from what we know of previous research, that there would be a higher incidence of difficulties reported in the North of England and in rural areas (see Mortimore and Blackstone, 1982). However, we were unable to find such differences. People reporting basic skills difficulties lived in all parts of England and Wales. They lived in rural areas and in urban areas.

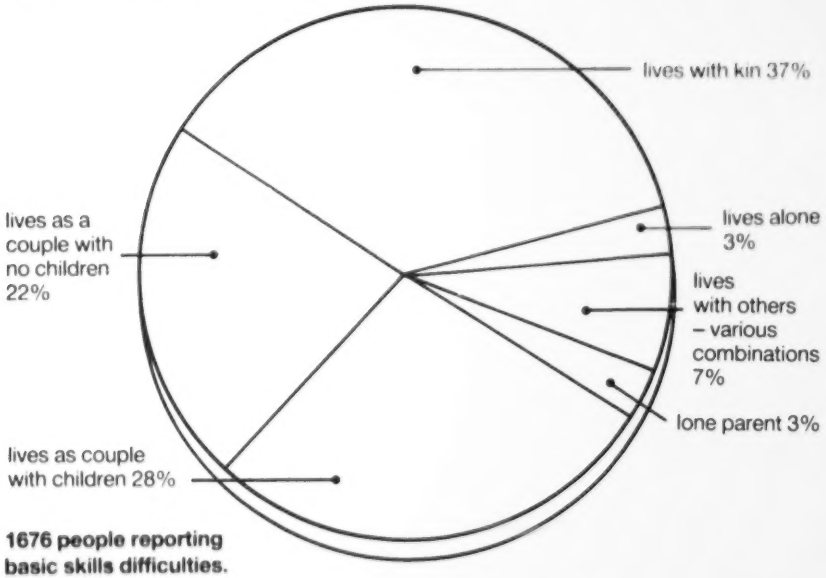
We found only two statistically significant differences: (a) there was a lower incidence of problems reported in Scotland (9% of the population as compared with 13% in the cohort as a whole) and (b) there was a lower incidence of people reporting problems in more privileged communities where we would expect people to be better qualified than the norm, to have higher incomes and higher-status white collar jobs (suburbs and service centres).

4.2 Current domestic situation

Some understanding of the home lives of people reporting basic skills difficulties is important to give us an idea of responsibilities they have as adults which might affect their involvement in adult basic education. An obvious example is responsibility for children.

Figure 7 shows the domestic situation of adults reporting basic skills difficulties, at the time of interview.

Figure 7
Current Family and Household type


lives with kin 37%
lives alone 3%
lives with others – various combinations 7%
lone parent 3%
lives as couple with children 28%
lives as a couple with no children 22%

1676 people reporting basic skills difficulties.

- Many people still lived in their parental home at age 23 years, and this was particularly true of men. Forty-eight per cent of the men were in this situation and just 21% of the women reporting basic skills problems. Correspondingly, many more women had a marital partner by age 23 years old (64% compared with 43% of men).

- There was no difference between problem and non-problem group in the percentage of people with marital partners (approximately one half of all 23 year olds). This is only of interest in that it contradicts one of the few early surveys of adult literacy students, carried out by the National Association of Remedial Education (1971). With a population highly biased towards those in custody they concluded that 'the personal immaturity, insecurity and impairment of social development associated with adult illiteracy is reflected in the number of men and women who either marry late or fail to marry.' Apart from disagreeing with the interpretation of their result, we do not find the result itself to be supported by our study.

- Those who reported basic skills problems had more dependent children than the cohort as a whole. One third of people (45% of women and 25% of men) reporting basic skills problems at age 23 years had dependent chil-

dren, compared with one quarter of people in the rest of the cohort. Again, this fits in with what we know about their educational and socio-economic background.

- There were also more lone parents than would be expected within the basic skills group and with the exception of one man, all of these lone parents were women. Seven per cent of women reporting basic skills problems were lone parents.

The incidence of lone parents and of dependent children generally has implications for provision particularly for women who generally have responsibility for the children and are occupied with them during a period of their lives when they might otherwise have been building up employment experience and further education or training. By the time they were 19 years old, one third of women in the basic skills groups had a child, versus only 12% of the men in the group.

4.3 Housing and Financial Circumstances in adulthood

Are people who report basic skills difficulties worse off, in terms of housing and income than other 23 year olds? From what we already know about their employment situation, we would suspect that this is so. If this group of young adults are poorer than others, this too has implications for provision, in terms of fees, study facilities and other support. We have looked at several indicators of how well-off people are. These include housing, earnings and income from state benefits:

- People reporting basic skills problems were, on average, living in more crowded conditions than people in the rest of the cohort. The percentage living in extremely over-crowded housing was very small indeed for either group. 5% of people in the basic skills group and 3% in the rest of the cohort lived in accommodation with more than one person per room.
- More people in the basic skills group were living in council housing or sharing with other relatives. Fewer owned their own home (23% versus 31% in the rest of the cohort).
- Eight per cent of people in the basic skills group had been homeless since age 16 years, significantly more than in the rest of the cohort. More women than men in the group had experienced homelessless (9% of women and 7% of men).
- In terms of income, the incidence of basic skills problems decreased as income rose. Those reporting problems had lower net earnings per hour,

and more of them were receiving state benefits when interviewed (see Table 11).

The average net earnings per hour for those reporting basic skills difficulties was 173 pence and 184 pence per hour for the rest of the cohort. Women's earnings were significantly lower than men's, with women in the basic skills group averaging only 155 pence per hour.

Table 11 People receiving state benefits of different kinds at time of interview, aged 23 years in 1981.

Benefit Received	*Basic Skills Group*	*No Problem Group*
1. Unemployment, and/or supplementary benefit, or family income supplement	22%	13%
2. Sickness or disability benefit	4%	2%
Total number of people (100%)	1676	10861

N.B. People may have received more than one type of benefit. Therefore the two categories are overlapping and cannot be added together.

People in the basic skills group were particularly highly represented among those receiving supplementary or disability benefits:

- 1 out of 4 people in the cohort receiving supplementary benefit reported problems with literacy or numeracy
- 2 our of 3 of those receiving disability benefit reported problems with literacy or numeracy.

4.4 Health and Disability

Knowing about the possible health problems and disabilities affecting people who report basic skills difficulties is important for assessing the need for special provision in adult basic education.

There are many different measures in the data referring to health and disability (see Power, 1984). On some of these measures there are clear relationships with basic skills problems.

The best way of explaining the results is to say that within the basic skills group there was a small but significant group of people whose lives had been affected by health related problems. A few of these had experienced the multiple problems caused by severe disablement either physical or mental. However, as we might expect, the majority of 23 year olds reporting basic skills difficulties were fit and well.

- When they were asked to give an overall assessment of their own health, 80% of the basic skills group reported having 'excellent' or 'good' health compared with 91% of the whole cohort.

- On several measures the basic skills group contained more people with symptoms of depression. Three hundred people in the basic skills group scored high on 'malaise', a self-report scale of depression. This is 18% of the group as compared with only 6% of the rest of the cohort. Four percent of the group had been diagnosed as clinically depressed. Scoring high on the 'malaise' score is associated with other variables besides reporting basic skills difficulties: for example being a woman or being unemployed. This is as likely to be an effect as a cause of educational and social problems and it may also affect the tendency to report basic skills problems.

- Specific health problems reported by the problem group more often than the whole cohort were: sensory problems (affecting 6% of the group) and mental problems (affecting 7% of the group). We estimate from assessments made earlier in childhood (see section 6.1) that approximately 7-8% of adults in the basic skills group were mentally handicapped and this may be the same group of people identified here as having mental problems.

- There were 122 registered disabled people in the whole cohort, of whom 53% reported basic skills problems. This is obviously, then, a high risk group. However, as we can see from the small numbers involved, the registered disabled were only a tiny minority (4%) of all those who reported basic skills problems.

- 576 people in the whole cohort reported that they had a longstanding illness or disability of some sort. Almost all of the registered disabled were contained within this group (the 17 people who are not have presumably suffered recent onset of disability). Thirty one percent of those who reported longstanding illness or disablement reported basic skills problems. The likelihood of reporting basic skills problems increases with the severity of the disability, as we might expect.

Section 5:
EDUCATIONAL BACKGROUND

This section begins to explore the earlier experiences of this group of adults within school. The findings reported here are only a beginning. We cannot hope to do justice to the complexity of the information given the current state of our analysis. Previous publications have used the NCDS data to look at factors affecting educational attainment and these are relevant here. They should be read by anyone with a particular interest in this aspect of the report (see Fogelman 1983, Steedman 1980).

There are many aspects of educational background that could be covered in this section. For example, what kind of schools did these adults go to? Did they miss out on school? Did they get any help at school with their literacy and numeracy difficulties? How early on were these difficulties apparent?

We report below on a few of these topics but first, there are some important things to bear in mind in interpreting the findings that follow.

We have already reported that 93% of people in the basic skills group left school at the minimum leaving age, and 58% of people in the group were still without any educational or training qualification (apart from a lower grade CSE) by age 23 years. When we look at the attainments of children who later report basic skills problems as adults it is worth bearing in mind what the 'average' standard expected in school has been for these people. According to information in the NCDS data, the average attainment expected in Maths or English is a CSE pass Grade 2-4. So to say that a child is 'average' in aptitude or performance is not to claim a great deal in terms of likely exam attainment. 'Average' expectations also imply that teachers accept that many children will perform in the classroom below this norm.

We should also note that the missing values are much higher for this earlier data, particularly at age 16 years and we can only estimate the pattern of results for the missing individuals.

5.1 School Characteristics: type of school attended and class size.

There are many things which make a given child's experience of schooling dif-

ferent from another's. For instance, schools may vary and we look briefly here at just two factors which have been suggested to be important.

Table 12 shows the number of children in different types of school at age 16 years. There are no surprises in the pattern of children in each type of school who report basic skills difficulties. In comprehensive schools the percentage (13%) was the same as in the cohort as a whole. It was higher in secondary modern schools and in special schools and lower in grammar schools.

Table 12 Percentage of children in different types of schools reporting basic skills difficulties as adults

	Total number of children in this type of school	*% reporting basic skills difficulties later*
Comprehensive	5813	13%
Grammar	1123	2%
Secondary Modern	2162	17%
Technical	53	1%
Public school	366	9%
Direct Grant	243	4%
Special school	139	69%
Approved School	13	31%
Other	84	17%
All Schools	9996	13%

Missing values: 20%

The data shows that children who later report basic skills difficulties were on average in smaller classes than others: at age 11 years the average class size for those later reporting basic skills difficulties was 32 pupils and for other chil-

dren it was 35. This bears out the paradoxical result on the relationship between attainment and class size found in other reports using the NCDS data (see Fogelman, 1983). One explanation of this result is that children experiencing difficulties in literacy and numeracy are more likely to be in smaller remedial classes or special units.

5.2 Interrupted schooling

One explanation for children failing to learn basic skills at school is that they may have missed out on schooling at crucial times. Reasons for absence from school will vary from child to child and for the same child at different times. At earlier ages it may signal bad health or family pressures. Truancy is more likely to be a factor at later ages.

We have looked at schools' records of attendance for children in the cohort at ages 7, 11, 15 and 16 years. These do not tell us about the reasons behind children's absences from school but we can find out if there is any association between missing out on school for any reason and reporting basic skills difficulties later on.

The findings show that children who later report basic skills difficulties were absent from school more often and for longer periods than those who do not:

- At age 7 years teachers rated the attendance of 17% of children in the basic skills group as 'not good' (versus 10% of children in the rest of the cohort). At the other extreme, 37% of children in the basic skills group had almost perfect attendance (and 42% of the other children).
- At age 11 years, teachers rated the attendance of 13% of children in the basic skills group as 'not good', compared with 7% of children in the rest of the cohort.
- At age 16 years, schools recorded the number of absences for each child over the current and previous school years. During their last year at school, children in the basic skills group had an average attendance of 83% (compared with 89% for the rest of the cohort). During the previous year, children in the basic skills group had an average attendance of 86% (compared with 91% in the rest of the cohort).

Absence from school is clearly an indicator of later difficulties with basic skills but the figures suggest that this affects only a minority of children who have difficulties with reading, writing and number work.

Further analysis could identify the group of children who missed out on schooling most seriously and possibly the age at which this is most significant for acquiring basic skills. By looking at family background, health and children's own reports of truancy together we could begin to tease apart the reasons for absence from school.

5.3 Children identified as needing special help in school for educational or mental backwardness

How many children who report difficulties with literacy and numeracy as adults were given special or remedial help when they were at school? We look below at the numbers of children who attended special schools and also at those who were given remedial help within mainstream schools.

5.3.1 Children in special school at all ages

Less than 1% of children in the cohort as a whole received their education in a special school. However, within the basic skills group, 7% of children were in special schools by the age of 11 years and this percentage remains the same through the secondary years.

5.3.2 Children given special help within mainstream schools

Our overall estimate of special help received by children in mainstream schools is hampered by high missing values and the fact that different children received special help at different ages: it was very rare for any child to receive remedial help at all stages of their schooling. We have tried to combine results for special help given at ages 7, 11 and 16 years to identify three groups of children within the basic skills group:

1. children who received special help at some point during their schooling.

2. children who were identified as needing special help, but who never received it.

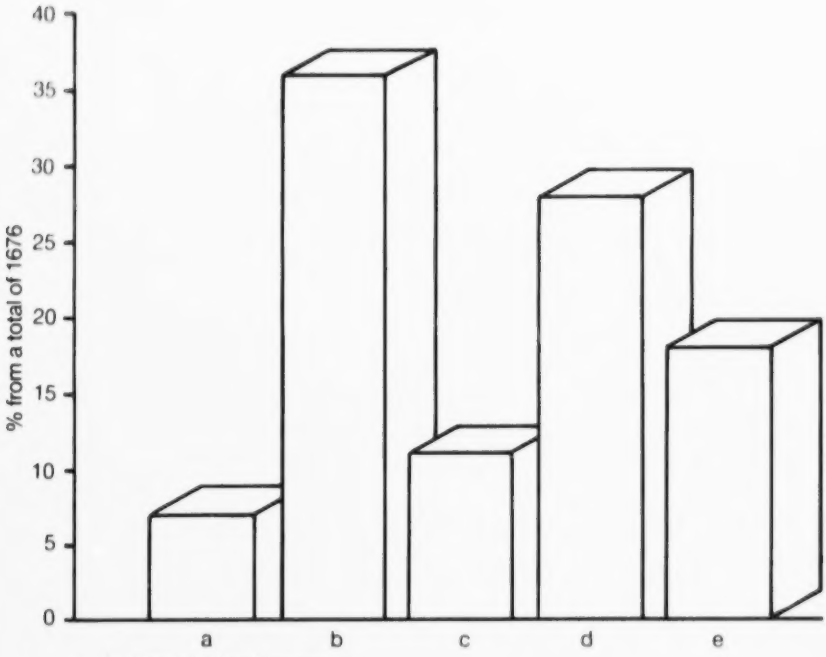
3. children who were never identified as needing special help at school.

The figures are presented below, including those in special schools, and those for whom we do not have complete information (See Table 13 and Figure 8).

Table 13 Special help received at school by children who later report basic skills difficulties in adulthood

Total number in the group	*In special school by age 11 years*	*Received special help at some point at school*	*Identified as needing special help, but never got it*	*Never identified as needing special help*	*Not enough information*
1676 (100%)	7%	36%	11%	28%	18%

Figure 8
Special help received at school by children who later report problems with literacy and numeracy



a. In special school by age 11.
b. Received special help in mainstream school at some point.
c. Identified as needing help but never got it.
d. Never identified as needing help.
e. Not enough information.

The results are striking: even if we assume that some of the children for whom we do not have complete information did receive special help, we know for certain that at least 28% of those who report basic skills difficulties as adults were never identified as needing any special help in school. A further 11% were identified, but did not get the help they needed, presumably through lack of available resources. This adds up to almost 4 out of 10 children in the basic skills group who "slipped through the net" of remedial help in school.

Most worrying of all are the figures for special help received at age 16 years, where over half of those who went on to experience difficulties with basic skills in adult life were rated as not in need of any special help.

Most of the children in this group left school in 1974. During their school-life the organisation of remedial help was somewhat different from the current situation. For example assessment for special needs was a medical assessment at this time and would now include a broader range of needs, incorporating teacher's and parent's assessments (Tomlinson, 1982). We should be wary of applying these findings to schools in the 1980's, therefore, especially since the implementation of the Warnock report on children with special educational needs (see Warnock, 1978). However, availability of resources within education is still a problem and provision varies from authority to authority (see Mortimore and Blackstone, 1982). It would be optimistic to think that all these children would be given adequate help if they were in school today.

5.4 Reading and Maths Comprehension tests at age 16 years

Can we predict who will report difficulties with literacy and numeracy from tests that they took earlier?

Results from Reading and Mathematics Comprehension tests at age 16 years are given in Tables IV and V in the appendix. Although these tests do not identify the adult basic skills group with total accuracy, the great majority of those later reporting problems do score at the lower end. If we match the scores with the appropriate type of problem (e.g. the reading test with poor adult readers), predictability increases:

- The match is least good for maths: 45% of those who later report maths problems score in the bottom category of the maths test.
- 61% of those later reporting spelling/writing problems score in the bottom category of the reading comprehension test, while 83% of those with later

reading problems do so. The reading test is, therefore, better at identifying low adult readers than spellers and writers as we might expect.

Again, test scores at ages 7 and 11 years were associated with having basic skills problems in adulthood. However, as for test scores at age 16 years, they were by no means prefect predictors: not only did they fail to identify all adults in the basic skills group, but there were many people scoring at the lowest levels on these tests who did not appear in the adult group.

5.5 Children's and Teachers' assessments at age 16 years

We can also look at whether the children themselves were aware at age 16 years that they were likely to experience difficulties later on with literacy and numeracy. We also have teachers' assessments of 16 year olds' functional skills.

Table 14 Aptitude for Maths: self-rating at age 16 by those who later report problems with maths.

Self report as adult	*Self report at age 16 years*			*Total (100%)*
	Below average for people of my age	*Average*	*Above average*	
Problems with maths	60%	38%	3%	441
No problems with maths	27%	56%	17%	8999

Missing values: basic skills group 33%. Others 24%

Tables 14, 15 and 16 show children's self-assessment of abilities in English and Maths at 16 years. The results have been cross-tabulated individually with the appropriate problem reported later at age 23 years. The tables show that:

- of those people who later report maths problems, 40% rated themselves as 'never studied or below average' in maths at age 16 years. 27% rated themselves as 'average or above average' and 33% were missing.
- of those people who later report spelling and writing problems only 22% rated themselves as 'never studied or below average' in English at age 16 years while 45% rated themselves average or above average.

Table 15 Aptitude for English: self-rating at age 16 by those who later report problems with writing/spelling.

Self report as adult	*Self report at age 16 years*			*Total (100%)*
	Below average for people of my age	*Average*	*Above average*	
Problems with writing	33%	59%	8%	807
No problems with writing	9%	65%	26%	8648

Missing values: basic skills group 33%, Others 24%

Table 16 Aptitude for English: self-rating at age 16 by those who later report problems with reading.

Self report as adult	*Self report at age 16 years*			*Total (100%)*
	Below average for people of my age	*Average*	*Above average*	
Problems with reading	48%	45%	7%	301
No problems with reading	10%	65%	25%	9183

Missing values: basic skills group 37%, Others 24%

- of those reporting reading problems as adults, 30% rated themselves 'never studied or below average' in English at age 16 years, while 33% rated themselves as average or above.

The self-report measure at age 16 years, therefore, does not overlap as much as we might expect with the adult one. People's assessments in relation to numeracy are the most consistent.

Table 17 Ability to do all calculations normally required by an everyday shopper: teachers' assessment at age 16 years.

	Teachers' Assessment		
	Yes – is able to cope	*No – not able to cope*	*Total*
Reports problems with maths as adult	89%	11%	475
No later problems with maths	98%	2%	9256

Missing values: basic skills group 28%. Others 22%

Table 18 Ability to cope with everyday needs in reading: teachers' assessment at age 16 years.

	Teachers' Assessment		
	Yes – is able to cope	*No – not able to cope*	*Total*
Reports problems with reading as an adult	77%	23%	354
No later problems with reading	99%	1%	9413

Missing values: basic skills group 26%. Others 22%

Teachers' assessments of 16 year olds' functional literacy and numeracy skills are shown in Tables 16 and 17. Teachers' assessment at age 16 years of children's abilities to cope with everyday needs in literacy and numeracy would not predict at all closely the adult basic skills group:

- At age 16, teachers rated as functionally competent 65% of the group who later report maths problems as adults.
- At age 16 teachers rated as functionally competent 57% of those who in adult life report reading problems.

5.6 Earlier assessments

There is a huge amount of information to explore on earlier assessments of literacy and numeracy (see Appendix C for details). We can only give here a sample of the kind of findings beginning to emerge and which could be included in a predictive analysis.

If we look at information at age 7 years, the earliest age at which problems with reading, writing and number work might be evident we find that many children who appear in the adult basic skills group were already identified by teachers as below average in literacy and numeracy work and in related abilities (see Table 19). Similar patterns are evident at age 11 years.

But there are other sides to this picture too, intriguing results such as that 15% of children in the basic skills group are rated as having 'outstanding ability in some area' at age 7 years. A full report on people who report basic skills difficulties would include information about their talents as well as their difficulties and it would be interesting to look more closely at these people with outstanding abilities.

Table 19 Teachers' Assessments age 7 years

% of children in each group teachers rated as:	*Basic skills group*	*No problem group*
'slow with numbers' or 'little ability'	75%	29%
'poor reader' or 'non-reader'	62%	19%
'below average' or 'markedly poor' oral ability	48%	16%
poor control of hands	38%	17%
poor physical co-ordination	25%	11%
Total number rated in each group	1440	9740

N.B. The different ratings would frequently apply to the same children. Percentages cannot be added together.

The results as we present them here are no more than tantalising glimpses. More analysis is needed to fit them together into a picture of past achievements and patterns.

Section 6:
OTHER CHILDHOOD EXPERIENCE

This section adds to our understanding of the earlier experience of the basic skills group by looking beyond their educational background to family, social and health factors that may have affected their progress in learning.

We have concentrated on factors identified in previous research as likely to affect educational performance generally or literacy learning in particular.

We include here information about health problems at various stages in childhood, particularly sensory problems with sight, hearing and speech. It is important to know the extent of these difficulties at age 7 when they may have put children at a serious disadvantage in learning to read and write. Such disadvantages may not be overcome later although the initial health problem that caused them may have long since disappeared or been corrected. In this case, we are looking for causes of the basic skills difficulties reported in adulthood.

However, we are also interested in the prevalence of such disabilities in adults so that we can estimate the likely need for special help within adult basic education. Since we have no direct information on this in the adult data, we can use data from the 16 year old survey as a basis for estimating adult needs.

6.1 Health and sensory problems in childhood

Small numbers of children in the cohort suffered from one or more of a range of disabilities including general motor disabilities, emotional difficulties, asthma, epilepsy and diabetes. In most cases the numbers are so small that it is impossible to say whether the prevalence is higher among people who later report basic skills difficulties. It is also hard to put a figure on the number of children overall who were affected by serious health problems, since we do not know yet from our analysis how far it is the same or different children suffering from different types of health problem.

An indirect estimate of the number of children seriously affected by health problems can be found through information on school absences. (See Section 5.2 above).

6.1.1 Children with Special Needs

We have tried to make an estimate of the number of people within the basic skills group who were earlier identified as having special learning needs. This result is important for those involved in provision for adults.

We estimate that around 7-8% (approximately 120) of those people reporting basic skills difficulties as adults had earlier been identified as having special learning needs.

This estimate is based on:

- the number of children in the basic skills group who were in special schools by the age of 11 years.
- the number of children identified by schools as in need of special help once they left school at 16 years.
- the number of children defined by the medical assessment of age 16 years as being 'mentally retarded'.

Those needing special help because of sensory or other physical disabilities will overlap with this group but are not identical with it. The extent of these specific needs by the time the children have reached adulthood is hard to assess because many people will have vision and hearing problems corrected through the use of glasses and hearing aids. The extent of sensory problems in childhood is described in the following sections.

6.1.2 Sight

> Having a problem with eyesight in childhood was not associated with reporting basic skills difficulties as an adult, although problems with eyesight did affect a large minority of people in the group

By age 16 years, over 200 people in the basic skills group were affected and this number may well have grown by age 23 years. Problems with eyesight generally increase with age, especially short-sightedness, and there is evidence in the data that children from middle class families were particularly affected by this (see Fogelman, 1983).

- At age 7 years there was no difference between the basic skills group and others in problems with eyesight. Around 15% of all children had some

visual defect, but hardly any of these were assessed by a doctor as handicapping the child in any way: less than 1% were rated as having 'severe' problems with vision.

- By age 11 years there was still no difference between the basic skills group and the rest of the cohort: 12% of children were assessed as having a permanent, visual defect (this includes 2 blind and 6 partially sighted children). A further 6% had transient problems. Just 2% of the cohort were judged by a doctor to have a problem which might interfere with normal functioning (50 children in the basic skills group).
- By the age of 16 years more children in the cohort as a whole had eyesight problems than in the basic skills group (18% versus 13%). This finding is related to the results in Fogelman (1983) mentioned above. 12% of children in the basic skills group were wearing glasses by age 16 years.

The findings suggest that problems with eyesight were more likely to be associated with being a good reader than a poor reader in adulthood.

6.1.3 Hearing

We have found some relationship between hearing loss at age 11 years and later reporting difficulties with basic skills. We could find no relationship at age 7 years or at age 16 years.

- At age 7 years, 2% of the basic skills group were rated by a doctor as having 'moderate or severe hearing loss'. This percentage is no different from that found among children in the rest of the cohort.
- By the age of 11 years the number of children affected by hearing problems rose considerably and we cannot dismiss the possibility that some earlier hearing problems were undetected (though this group of children was screened more carefully, perhaps, than seven year olds would normally be).
- At age 11 years, 3% of the basic skills group were rated as having hearing loss which caused some interference in everyday functioning. A further 9% had some hearing loss but, in a doctor's judgment, this would not handicap the child on a day-to-day basis. This total of 12% is higher than in the rest of the cohort (8%).

- By age 11 years, 14% of the basic skills group had experienced hearing impairment as opposed to 11% of the rest of the cohort.
- By the age of 16 years, around 4% of all children had hearing problems, but there was no difference between those in the basic skills group and the rest.
- We estimate, on the basis of figures at age 16 years that approximately 4% of adults in the basic skills group had some hearing loss, but this did not necessarily interefere with their everyday activites.

6.1.4 Speech

In contrast with the findings on vision and hearing, the data shows a much more consistent relationship between problems with speech and reporting basic skills difficulties in adulthood.

We should, however, again emphasise that speech problems only affected a minority of children in the group.

- Significantly fewer children in the basic skills group were talking by the age of 2 years, according to reports from their parents (12% were late talkers, compared with 5% in the rest of the cohort).
- At age 7 years, parents of children in the basic skills group were more likely to report that the child had had a stutter or stammer or other speech difficulty by this age:

	% of parents who answered 'yes'	
	Basic skills group	no problem group
Has your child ever had a stammer or stutter?	9%	5%
Has your child ever had any other speech difficulty?	15%	9%

- At age 7 years, 4% of children in the basic skills group were rated by a doctor as having a severe speech problem (versus 1% of the rest).

- At age 11 years, 9% of children in the basic skills group were assessed by a doctor as having an articulation defect. This was over twice the rate in the rest of the cohort.
- At age 16 years, more people in the basic skills group were assessed by a doctor as having speech defects than in the rest of the cohort. (6% versus 2%).

Although we need to explore this pattern of results more thoroughly, these findings suggest that difficulties with spoken language in early childhood were associated with reporting basic skills problems in adulthood. Comparing the different assessments at the three ages, and putting together information from parents, teachers and doctors is complicated. However, it looks as if this would be an important area of analysis to follow up.

Speech difficulties are more prevalent in childhood than in adulthood, as we might expect, and this is therefore a less important factor for adult learners of literacy. Speech difficulties, may, however, be an important indicator for teachers of young children that difficulties with basic skills are likely to follow.

6.2 Family and Social Background

There are a number of variables available in the NCDS data that have been identified by other research as being associated with social disadvantage, poverty and with generally low achievement at school (See Essen and Wedge, 1982, Mortimore and Blackstone, 1982, Fogelman 1983). Almost all of those factors we have been able to look at during the present study are associated with reporting basic skill difficulties in adulthood.

As we have stressed in other parts of this report, the differences we have identified are not absolute. Many of those who did not report basic skills problems had experienced disadvantage of various kinds and the high scores on any one of the following measures affected only some of the children who appear in the adult basic skills group – in some cases, only a tiny minority. However, these measures can tell us about the kinds of experiences in childhood that are likely to put people 'at risk' of reporting basic skills problems later on.

All the following variables were associated with the basic skills group: and children who had experienced them were significantly more likely to appear in the basic skills group:

- Children whose fathers worked in manual occupations: 3 out of 4 people in

the basic skills group had fathers working in manual occupations when they were age 16 years (compared with 64% in the rest of the cohort).

- 16% of the basic skills group were having free school meals at age 11 years – twice the rate for the rest of the cohort and the same percentage lived in families who had suffered financial hardship over the previous 12 months.
- 4% of children in the basic skills group came from families living on low income benefits and pensions, and again the rate is double that found in the rest of the cohort (figures for age 11 years).
- Twice as many children in the basic skills group were born 5th or later in their family (14% of the group as opposed to 7% in the rest of the cohort). The official definition of a large family is 5 children or more and existing research shows children from larger families to be more likely to be lower achievers at school.
- Except for death of either parent, the basic skills group experienced more of all types of family difficulty at age 7 than children in the rest of the cohort. This includes housing difficulties.
- Children who had been in care at some point, whether long stay (more than 6 months) or short stay. These are only 4% of the basic skills group.
- Children who had not lived with both parents throughout childhood (18% of the basic skills group and 14% of the rest of the cohort).

Although our analysis of the social background of people reporting basic skills difficulties is incomplete, the results above point to the importance of the same group of factors that are associated with low achievement at school in general. So far we have not had time to look at whether these measures of disadvantage were all experienced by the same children or whether different ones (or different combinations) were important for different children and at different ages. But which ever it is, we can say that there was no one factor in family or social background that predicted being in the basic skills group. The picture is complex and there may well be more than one answer to the question 'why are there adults with literacy and numeracy difficulties?'

6.3 Attitudes of children and their parents

Children's attainment in school is widely believed to be affected by their own motivation and attitudes towards school, which in turn are shaped by their parents' attitudes. (See discussion in Mortimore and Blackstone, 1982). There

are a number of different questions in the survey which give us an idea of this aspect of people's background and feelings.

At age 16 years, children were asked to say how they felt about a number of statements to do with school. Their answers were combined to form an 'academic motivation scale'. These statements, and the responses to them are shown in Table V in the Appendix.

The total possible score on the academic motivation scale is 40, and the higher the score, the lower the motivation. Children in the basic skills group scored, on average 22 points and those in the rest of the cohort scored 19. This difference is highly significant.

There was a clear trend towards lower motivation in the basic skills group at age 16, but there were still a number of children scoring at the highest motivation level.

On individual items, the clearest differences between basic skills groups and others are: 'School is a waste of time' and 'I never take (school) work seriously.'

Relationships are less strong on items such as 'I am always willing to help the teachers' and 'I am quiet in class and get on with my work.'

Other important findings on attitudes from the NCDS data are:

- The basic skills group and others both cited wanting financial independence as a major reason for leaving school (39% and 36% of each group mentioned this), but the basic skills group were more likely to mention 'taking it for granted' (17% v 11%), and 'the need to earn as soon as possible' (18% v 9%). Very few children said they were 'not good enough to stay on.'

- Children in the basic skills group were more likely to say they didn't want to continue studying after school, or they didn't know. These two categories together cover 51% of those who answered. This could be a useful discriminator for those later likely to be interested in tuition in adult basic education.

- There were more uninterested parents in the basic skills group but still many very interested parents: 1 child in 3 who later reports basic skills difficulties said their parents were 'very' or 'fairly' anxious for them to do well in school and the teachers' assessments of parental concern and interest put this figure even higher, especially for fathers.

There were predictable differences in most of the variables relating to parents'

attitudes towards literacy and schooling in general, including parents' reading habits, parents' desire for children to stay on at school or continue studying. For example, parents of children who later report basic skills difficulties read less often to their children at age 7 years. (See Table 20).

The majority of all children were read to by both parents, but fewer in the basic skills group were read to by either parent. Overall, more mothers read to their children than fathers did.

Table 20 Do Parents Read to Children at Age 7 Years?

Father reads to child:	*At least once a week*	*Occasionally*	*Never*
Basic skills group	31%	34%	35%
Others	38%	36%	26%

Missing values: Basic skills group 21%. No problem group 15%.

Mother reads to child:	*At least once a week*	*Occasionally*	*Never*
Basic skills group	44%	37%	19%
Others	51%	34%	15%

Missing values: Basic skills group 17%. No problem group 13%.

Section 7:
CONCLUSIONS

1. How many people with literacy and numeracy difficulties?

Our estimate of the extent of difficulties people have will depend on what counts as 'a difficulty'. In this study, our definition is based on people's own report of whether or not they feel they have problems with literacy or numeracy in their adult lives. Just like other definitions of literacy and numeracy, this one has its strong points and its weaknesses. But, in particular, self-report seems a useful measure of those likely to take advantage of tuition in adult basic education (ABE).

- 1 in 10 of those interviewed reported problems with reading, writing or spelling since leaving school.
- 1 in 20 of those interviewed reported problems with numeracy since leaving school.
- overall, 13% of the sample reported some problems with literacy or numeracy since leaving school.

The evidence from this study therefore suggests a higher incidence of difficulties in the population as a whole than was previously thought and, as pointed out above, these figures are likely to be conservative.

Of all those reporting problems:

- 72% reported difficulties with writing/spelling
- 39% reported difficulties with numeracy
- 29% reported difficulties with reading

There is some overlap, especially between reading and writing groups, and a relationship between having literacy and numeracy difficulties. Contrary to stereotypes, then, having problems with literacy in adulthood is more likely to be a problem with writing than it is to be one of reading.

2. Where were the people who reported difficulties?

People reporting difficulties with literacy and numeracy were not concentrated in one geographical area. People from all over the country reported difficulties, and we were unable to find any important differences between the different regions of England and Wales. Nevertheless, fewer people in Scotland reported difficulties and fewer people living in well-off suburbs or other communities based on high-grade 'white collar' employment.

3. What practical difficulties did people report?

Many people who reported literacy and numeracy problems did not report that the problems had caused any specific difficulties or obstacles in their day-to-day lives. For these people there may be a general feeling of not meeting a standard expected by others or themselves. It is also possible that many people have developed ways of coping with or avoiding everyday difficulties.

When people were specific, they most frequently mentioned employment contexts as causing difficulties or presenting obstacles which prevented them from achieving something they wanted. Most of these obstacles prevented people from getting the jobs they wanted (looking for and applying for jobs) rather than interfering with their performance on the job itself. Many mentioned letters or forms as causing particular problems. Numeracy difficulties affected areas of home life more often than literacy difficulties did and women's responses emphasised home and children's needs more often.

People varied considerably in the degree of severity of the problems they reported. Approximately 7% of those with literacy problems were rated as having generalised problems ('I cannot read or write at all'). One in five people with numeracy difficulties reported they had problems with the basic operations of adding, subtracting, multiplying and dividing.

This suggests that those with severe problems with basic skills are a small but significant minority at one end of a spectrum. A large number of those reporting problems did have some competence in literacy and numeracy skills and by no means functioned on the outside margins of society. It is, therefore, both inaccurate and pejorative to refer to adults with basic skills difficulties as 'illiterate'.

4. Not a homogeneous group

- People varied as to the type of difficulty they reported (reading, writing and numeracy).

- There were important characteristics that affected people's lives, such as gender or type of employment.
- There were also small numbers of people within the group who had very specific needs that have to be taken into account in designing provision: for example, those with hearing, vision and speech difficulties, or those with the multiple problems associated with mental handicap or physical disability.
- People reported difficulties across a wide range of levels. This can be seen most clearly when we look at the highest qualification level achieved. It is reinforced by a number of other variables, especially when we try to make sense of earlier educational experiences and performance: 58% of those reporting basic skills difficulties had no educational or training qualification whatever by age 23 years. However, substantial numbers had some formal attainment already, some 34% had CSE's, O levels or an equivalent vocational qualification. The remaining 8% already had some higher professional or academic qualification.

People with difficulties with literacy and numeracy should not be treated as if they are all the same: they have a variety of needs and their personal circumstances vary.

This variety is not entirely unexpected given the relative view of competence in literacy and numeracy that we assumed at the start of this project but it has been a surprise to find such a wide range of achievements within the group.

5. Employment and Training

The great majority of people in the basic skills group were in paid employment. Those reporting difficulties with basic skills were largely to be found in the manual working class groups, and to have come from families of similar origin. In the case of women, there were many working in less skilled non-manual and personal service jobs. Many other aspects of their adult experience must be seen within this occupational context particularly their increased vulnerability to unemployment and redundancy, lower pay and access to training.

- 15% of people in the basic skills group were unemployed at the time of interview, compared with 9% of the whole cohort.
- 46% had had no education or training since leaving school.

When considering ways of improving access and provision for this group, their situation needs to be seen in the current context of the employment market and

the situation of low qualified and unskilled workers within it. Many people in the basic skills group fall into the social and educational categories of people least likely to get opportunities for post-school education and training of any sort (see Killeen and Bird, 1981) but perhaps most in need of it, given the current insecurity of the job market. Their problems are the problems of this group, but frequently with additional complications and extremes. Access to jobs, for the majority of these people, then, means moving out of an increasingly restricted sector of the labour market, rather than moving from unemployment into employment.

6. Gender differences

Gender differences are apparent in many of the results we have obtained, and are to be found scattered throughout this report, especially in relation to employment and training experiences.

- Men were more likely than women to report literacy problems of some kind since leaving school; 12% of men, compared to 7% of women. Equal numbers of men and women reported numeracy difficulties.

- However, women with difficulties in literacy or numeracy were much less likely to have attended courses for help with their problems: men were twice as likely to have received help with literacy and four times as likely to have received help with numeracy.

- Overall, 46% of people reporting basic skills problems had received no post-school training or education. If we look at the figures for men and women separately we find that 39% of men had received no post-school training or education compared with 57% of women with basic skills difficulties.

- Almost half the women reporting basic skills difficulties had dependent children (but only 1 in 4 of the men). Seven percent of the women were lone parents.

- Women reporting basic skills difficulties were poorer than the men: they had lower net earnings per hour, received more supplementary benefits and were more likely to have experienced homelessness.

There is a great deal of scope in the data for examining these differences in more depth and relating them to the educational attainment of girls and boys and to training and employment patterns more generally. In particular, the gen-

eral disadvantage that women suffer in relation to training needs to be taken into account when thinking about access, provision and take up of courses in adult basic education.

7. Health and Disability

Health problems affected small groups of people within the overall basic skills group. The great majority of these 23 year olds were, as we might expect, fit and well.

- The earlier data suggests that those who had speech problems as children were particularly likely to reappear in the adult group reporting basic skills problems.
- Those with longstanding illness or disability (either mental or physical) were also high risk groups.
- There are two self-report measures in the adult data of general physical and mental well-being and both of these were associated with reporting basic skills problems in adulthood: more people said their general health was only 'fair' or 'poor' and more people were depressed, according to their responses on a self-rating scale.
- Based on estimates from the earlier data, we estimate approximately 8% of adults reporting basic skills difficulties had special learning needs. There may be others in the group who needed special help because of difficulties with hearing, speech or sight.

8. Poverty and social background as adults

- People reporting basic skills problems were more likely to live in crowded housing conditions and to have less money.
- Many 23 year olds (particularly men) lived in their parental home but many others had families and households of their own. People in the basic skills group were less likely to own their own house and were more likely to live in council housing or with relatives.
- More people in the basic skills group were lone parents and they had more dependent children. Responsibility for these children lay much more heavily with the women in the group.
- People in the basic skills group had lower earnings per hour and more of them were receiving state benefits to supplement their income.

9. Early identification of special learning needs

- By age 11 years, 7% of children who later reported basic skills difficulties were in special schools.
- By age 16 years, 36% of those reporting basic skills difficulties in adulthood had received special help in mainstream schools.
- At least 40% of those reporting difficulties as adults had never received special help of any kind at school.

These findings suggest that a large number of adults reporting basic skills difficulties had slipped through the net of remedial help in school and that we need to look more closely at the support given to children who fall behind with literacy or numeracy work early on.

10. Assessments of literacy and numeracy abilities in school

We said at the beginning of this report that it is of central interest to us how far the different measures of literacy and numeracy overlap with one another. Our conclusion from the analysis so far is that there is a great deal of disparity between them. There is a genuine problem of interpreting and comparing the meanings of the different measures we have available, but it may also reflect something about average expectations of achievement in school and about the resources available to attend to the problems of those who are not achieving even averagely well.

- Neither teachers nor children themselves before they left school were very good at predicting the problems that later arose with literacy and numeracy. Perhaps the school-based definition of what counted as competence in basic skills was somewhat at odds with what mattered to people in their everyday lives. It may also mean that it is not possible to predict accurately the demands that an individual will face in adult life.
- We have a range of measures of literacy and numeracy available from the earlier data and they do not agree with one another to the degree we might expect. Test results on reading and maths, for example do not enable us to predict the adult self-report group with any certainty: this works both ways – by failing to pick up all those who report problems and by picking up people who have very low scores but who do not report problems later.
- Other school-based measures do not agree with one another either. For example, teachers' assessments of relative ability within the classroom and

the pattern of special help given to children through their school careers do not correlate well.

11. Other childhood experiences

We have looked at several of the reasons often put forward as to why adults may leave school still being unable to read, write or use numbers to their satisfaction. No one factor predicts the adult group but there are 'high risk' groups, and many of those measures that are associated with disadvantage in childhood do characterise the group of people who report basic skills difficulties as adults:

- Family difficulties such as financial problems, poor housing, being in care, are all associated with reporting basic skills difficulties as adults.
- Three out of four adults reporting basic skills difficulties came from a manual working class background.
- On average, 16 year olds who later reported basic skills problems were less motivated at school, and had parents who were less interested in their schooling. However, there was a great variety within the group, and many children and their parents had positive attitudes toward education.
- There is a definite relationship between absence at school at all ages and reporting basic skills difficulties as an adult. It is only a minority of children in the basic skills group who had missed out on schooling, however. The majority had good records of attendance.

12. What do we still need to know?

a) We need more detail about particular groups within the basic skills group:

- Those with different types of basic skills difficulties. For example, those with reading difficulties appear to be a more seriously disadvantaged group than those with writing difficulties. Numeracy difficulties may be associated with different variables from the language-based literacy difficulties.
- Those identified as having special learning needs of various sorts: people with multiple problems and needs associated with mental and physical handicap; those with specific learning needs related to sensory problems of hearing, sight and speech.
- Differences between the basic skills needs of women and men and the difficulties they face.

b) We need more information on the practical problems people face in different contexts in their lives, their attitudes toward literacy and numeracy and the meanings attached to them. We need to know more, too, about how people experiencing problems cope in everyday life and how they avoid obstacles and difficulties that they might face. In the employment context, for example, we need more information on what the literacy and numeracy demands of jobs are and on what barriers people face in searching and applying for jobs.

c) We need information on the basic skills needs of ethnic minority groups, bilingual groups and those for whom English is not their mother tongue. The NCDS data was not able to give us information about these groups.

d) We need to know more about the earlier learning experiences and reading histories of people reporting problems, the educational treatment they received, their patterns of difficulty and attainment across the years. A great deal of information exists in the NCDS data still which we have not had time to explore during the limited life of this project.

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APPENDICES

A. **The Literacy and Numeracy Questions asked of 23 year olds.**

B. **Selected Profiles of Adults included in the Basic Skills group.**

C. **Information about Literacy and Numeracy in the NCDS data.**

D. **Findings: Supplementary Tables.**

Table I	Industrial Classification
Table II	Regional breakdown
Table III	Constituency Type
Table IV	Mathematics Comprehension Age 16 years
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APPENDIX A

The Literacy and Numeracy Questions asked

1. As you probably know, thousands of adults have difficulties with reading or writing at one time or another. It would help us if you could answer some questions about your own experience of reading and writing.

   a. Since leaving school have you had problems with reading?

   b. Since leaving school have you had problems with writing or spelling?

   Those who answered 'Yes' to either question 1a or question 1b were then asked:

2. Do these problems now make anything difficult for you in everyday life? What things in particular are made difficult for you?

3. Since leaving school have you had problems with number work or basic maths?

   Those who answered 'yes' to question 3 were then asked:

4. Do these problems now make anything difficult for you in your everyday life? What things in particular are made difficult for you?

   People who had had any problems with reading, writing, spelling or number work since leaving school (i.e. who answered 'Yes' to either Q1 or Q3 above) were then asked:

5. Is there anything that you would like to do that you feel lack of reading or number skills prevents you from doing? What things in particular are you prevented from doing?

6. I would now like to ask you about any classes or courses you have done since leaving school which did not lead to formal educational qualifications. I am interested in any courses you have done – evening classes, courses you have followed on television, courses organised by Trade Unions and so on. Since leaving school, have you ever taken any courses or classes to

   a. get better at reading or writing?

   b. get better at figures or arithmetic?

APPENDIX B

Samples of Verbatim Information

Sex	*Work Experience*	*Literacy Problems*	*Tuition*	*Numeracy Problems*	*Tuition*
F	First job as hairdressing apprentice – sweeping up the shop, blow dries and shampooing, generally learning how to run a retail shop. Current job works as a mobile hairdresser, travelling to people's homes (self employed)	Reading and writing. Writing cheques – they found out I've got dyslexia when I have to read forms in my business – but I have an accountant	Yes	None	No
M	First job as glass-polisher, polishing TV screens using an electric drill with a pad. Reconditioning TV tubes. Last job as a labourer, cleaning wine vats and bottling wine.	It does prevent me from applying for jobs. I don't feel confident enough in my ability to write to apply.	No	None	No
F	First job as a machinist making suits for men and casual wear. Last job also as a machinist, putting zips together on a power press.	I can't fill in forms, I can't read to my children and I don't get to know of any bargains to be had because I can't read the adverts.	No	None	No

Sex	*Work Experience*	*Literacy Problems*	*Tuition*	*Numeracy Problems*	*Tuition*
M	First job as assistant design controller for W.H. Smiths. We were the 'in house' architects, supposed to bring up new ideas for the design of shops, doing the mundane tasks of an architect's department – drawing board work. Needed a reasonable standard of art design. Now works as a designer in a retail business and as a consultant, mostly shops and office design. Helps senior designer draw up and implement designs. Job requires either a diploma or degree in interior design.	None	No	I can't do calculations in my head. I need a calculator – I would like to be better at maths, e.g. logarithms, calculus. Causes only minor difficulties in my job.	No
M	None. Mentally Handicapped and Spastic.	Reading age of 6.	Yes	Skills are 'non-existent'	No
M	First job as spare-parts man in the motor trade, requiring reasonable levels in English and Maths. Now manages a garage and motor vehicle repair centre. Job involves bookwork, driving, selling spare parts, painting, business experience.	Writing and spelling. Prevents correspondence at a higher level.	No	Maths – no problems reported.	Yes
F	First job as home help working for social services cleaning for old people and in a nursery. Lost job was working as a packer for a company making greeting cards.	When I get letters I have difficulty reading them. When I have to fill in forms I have to get someone to help me.	Yes	Yes. Adding up money.	No

Sex	*Work Experience*	*Literacy Problems*	*Tuition*	*Numeracy Problems*	*Tuition*
F	First job working for company making nets of all sorts, worked as a shuttlefiller, filling the shuttles with cotton and putting them in the net-making machines. Last job worked as a Bingo-caller – check numbers against winning lines.	Reading and spelling. If I have any letters I have to get someone to explain it and read it to me. When I fill in forms I have to print and I have the DHSS checking my signature often as I have to print it.	No	I can add but not take away. I have to get someone to help me with big money or figure problems.	No
M	First job as a labourer, cleaning (but not operating) wood-turning machines. Current job as a bookbinder binding HMSO reports. Trained to do book-binding.	Reading and writing – no everyday difficulties but I wanted to be a chef but I couldn't do the exams.	No	When playing darts I can't do the adding on the board – but I can do it in my head!	No
F	First job as a machine servicer, fetching and carrying materials for the sewers, working for a furniture manufacturers. Now works as a barmaid, serving customers in a pub. Sometimes acts as head barmaid, supervising the other girls.	Reading magazines is difficult and writing letters.	No	None	No
F	(Interviewer's comments): Respondent can't read so I had to help her with cards – not very intelligent so her present partner helped her as he knew her life better than she did herself. She spent 6 months training after school in a unit for brain-damaged children. She said she wasn't brain-damaged but her brother who is still in the unit is. History of violence in the family. Mother had black eye when I called. Respondent had been beaten many times. The 6 months training 74/75 Feb was to help with reading, etc., and also speech as she couldn't talk properly then but she does now. The 6 months was in a special unit for the disabled. Period of time in care when she was 15 – a bit hazy can't remember it much. Respondent battered by father and by 1st husband.				

Sex	*Work Experience*	*Literacy Problems*	*Tuition*	*Numeracy Problems*	*Tuition*
M	First job as a shrimp fisherman. I caught fish and sold them in a shop. Currently works as a loading hand, loading lorries working for oven-ready poultry company. Supervises other people who load the lorries and stack the deep freeze.	Reading and writing problems. I would like to join the army but they won't accept me.	No		No
M	No information. ? Never employed	Illiterate. I got letters which I don't understand such as from the social security.	No	None	No
F	Started work as a student nurse, orthopaedic training aiming for SRN. Currently working as a theatre nurse, obtained SEN, ONC, and course in theatre nursing. Assists Surgeons and patients to recover. Looks after pupil nurses and teaches them.	None	No	In my job I'd like to be able to do drug dosages, etc. better and be quicker in working things out. I can work them out but it takes me longer than others.	No
M	First job – apprentice motor mechanic, repairing motor cars, lathes, valve cutters, etc. Last job as tyre fitter, selling and fitting tyres. Requirement City and Guilds Certificate.	None	No	I never was good at maths, I found difficulty with calculations when I was at tech.	Yes

Sex	*Work Experience*	*Literacy Problems*	*Tuition*	*Numeracy Problems*	*Tuition*
F	First work did odd jobs working as an assistant to the boss – business making cloth dolls and peg dolls. I did everything, sending orders abroad, making the dolls, taking phone calls. Currently works as a check-out operator Assistant in a cash and carry supplying the trade with food and drink. Operates checkout and fills shelves with wines, spirits and tobacco.	Reading and writing. I would like to read books properly but I just can't get into it. Everybody is fantastic – it's just me. *She said she had difficulty in reading because she was dyslexic. Her husband did most of the reading for her and was obviously used to doing this. She said she could do it but it would take a very long time. She answered all the questions otherwise completely unaided.	No	None	No
F	Used to work as a door to door van assistant with dry-cleaners. Sometimes helped in the factory putting polythene over the garments that had been cleaned.	No problems.	No	Prevents me getting a job where number work is required. I'm picking up a bit now, better than at school. I never liked it anyway.	No
F	Shaker out at laundry. Shaking out the clothes before they were washed.		No		No

*Interviewer notes: This respondent was unable to read a cross and is to some degree mentally retarded . . . Respondent's activities are limited not only through reading and writing inability but due to an obvious mental condition – knew neither time of day or day of week – a very sad waste of life.

APPENDIX C

Information about Literacy and Numeracy in the NCDS Data

Age 7 Teachers' assessments of abilities
Reading Standard
Southgate group reading test
Draw-a-man Test
Copying Designs Test
How often parents read to child

Age 11 Teachers' assessments of abilities
General Ability test (verbal and non-verbal)
Reading Comprehension Test (NFER)
Maths Comprehension Test (NFER)
Essays written by children

Age 16 Teachers' assessments of abilities
Reading Comprehension Test (NFER)
Maths Comprehension Test (University of Manchester)
Self-report of Aptitudes

Age 23 Self-report problems with literacy
Self-report problems with numeracy

Full details of all tests are available from the National Children's Bureau.

APPENDIX D

Table I Industry of Current or Last Job (Standard Industrial Classification, 1981)

	Basic Skills Group	*Total Number of People Working in this Type of Industry (100%)*
Div. 0 Agriculture, Forestry, Fishing	19%	183
Div. 1 Energy & Water Supply Industries	13%	274
Div. 2 Extraction of Minerals & Ores other than Fuels; Metal Manuf. Mineral Products & Chemicals	16%	350
Div. 3 Metal Goods Engineering & Vehicle Industry	15%	1067
Div. 4 Other Manufacturing Industry	18%	1240
Div. 5 Construction	20%	735
Div. 6 Distribution, Hotels, Catering, Repairs	16%	1941
Div. 7 Transport & Communication	12%	602
Div. 8 Banking Finance Insurance, Busines Services & Leasing	4%	908
Div. 9 Other Services	12%	2581
TOTAL	14%	10123

Table II People reporting difficulties with basic skills broken down by region in which they live

Region	*Total number in the cohort living in this region*	*% Reporting basic skills difficulties in this region*
Greater London	1543	16%
South East	2296	14%
South West	945	14%
Wales	654	17%
West Midlands	1191	15%
East Midlands	838	12%
East Anglia	409	18%
Yorks & Humber	1099	12%
North West	1435	12%
North	788	11%
Scotland	1217	9%
TOTAL	12,415	13%

Missing values: 1%

Table III People reporting basic skills difficulties categorised by the type of constituency* in which they live

Type of constituency	*Total number in the cohort living in each type of constituency*	*% Reporting basic skills difficulties in this type of constituency*
Suburbs Service Centres	1914	12%
Rural areas in England & Wales	916	15%
Rural areas in Scotland	251	6%
Resort & Retirement areas	477	13%
Growth areas	2836	15%
Stable industrial areas	3174	13%
Areas dominated by Local Authority housing	1275	12%
Metropolitan inner areas	957	15%
TOTAL (all types)	11,800	13%

*see Webber 1978 for details of these categories

Table IV Mathematics Comprehension age 16 years

Score	*0-6*	*7-9*	*10-13*	*14-19*	*20-31*	*Total*
Basic skills group	41%	28%	18%	8%	5%	1154 (100%)
Adults with Maths problems only	45%	30%	17%	5%	3%	444 (100%)
No problem group	11%	19%	21%	23%	23%	8316 (100%)

Missing values No Prob: 23%
Basic skills group: 31%

Table V Reading Comprehension age 16 years

Score	*0-20*	*21-25*	*26-29*	*30-32*	*33-51*	*Total*
Basic skills group	54%	19%	13%	9%	4%	1168 (100%)
Adults with spelling problems only	61%	18%	10%	8%	4%	821 (100%)
Adults with reading problems only	83%	9%	5%	2%	1%	312 (100%)
No problem group	16%	21%	24%	22%	17%	8343 (100%)

Missing value No prob: 23%
Basic skills group: 30%

NOTE: Scores on these tests are skewed. They have therefore been re-categorised into 5 groups in order to show contrasts between the basic skills and the no problem groups. Approximately 20% of all responses fall into each of the categories.

% given are of group totals.

Table V **Attitudes towards school, aged 16 years**

16 year olds were asked to rate the following statements 'true' or 'false'	*(100% = 8280) No problem group*	*(100% = 1140) Basic skills group*
	% who answered 'true or partly true'	*% who answered 'true or partly true'*
I feel school is largely a waste of time	9%	21%
I am quiet in the classroom and get on with my work	62%	55%
I think homework is a bore	53%	61%
I find it difficult to keep my mind on my work	34%	47%
I never take work seriously	13%	25%
I don't like school	28%	42%
I think there is no point in planning for the future: you should take things as they come	18%	31%
I am always willing to help the teachers	60%	58%

Missing values varied from statement to statement but were approximately 32% for the basic skills group, 24% for others.